



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.04 and #12326812.07

[TESTLAB]

[ISSUE DATE] 16-FEB-2021

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] 8CRDI-TL-L20-835U-L20-835D-xxx-DIM1-UNV-OM-CSU-LW-WHD-WM

[LUMINAIRE] White formed aluminum housing, medium distr specular reflector, cover glass up,

[MORE] wide distrib flush prismatic lens trim down

[LAMP] Two white LEDs (one up/one down)

[_SEARCH_SOURCE TYPE] LED

[_SEARCH_APPLICATION] INDOOR, DIRECT, INDIRECT

[_SEARCH_MOUNTING] WALL

CHARACTERISTICS

| | |
|---------------------------------|--------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 3376 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 89 |
| Total Luminaire Watts | 38.0038 |
| Ballast Factor | 1.00 |
| CIE Type | General Diffuse |
| Spacing Criterion (0-180) | N.A. |
| Spacing Criterion (90-270) | N.A. |
| Spacing Criterion (Diagonal) | N.A. |
| Basic Luminous Shape | Circular |
| Luminous Length (0-180) | 0.50 ft (Diameter) |
| Luminous Width (90-270) | 0.50 ft (Diameter) |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 21780 | 21780 | 21780 |
| 55 | 18133 | 18133 | 18133 |
| 65 | 13776 | 13776 | 13776 |
| 75 | 9990 | 9990 | 9990 |
| 85 | 6510 | 6510 | 6510 |

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CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> | <u>202.5</u> |
|--------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 0.0 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 |
| 2.5 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 |
| 5.0 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 |
| 7.5 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 |
| 10.0 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 |
| 12.5 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 |
| 15.0 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 |
| 17.5 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 |
| 20.0 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 |
| 22.5 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 |
| 25.0 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 |
| 27.5 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 |
| 30.0 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 |
| 32.5 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 |
| 35.0 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 |
| 37.5 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 |
| 40.0 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 |
| 42.5 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 |
| 45.0 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 |
| 47.5 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 |
| 50.0 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 |
| 52.5 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 |
| 55.0 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 |
| 57.5 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 |
| 60.0 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 |
| 62.5 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 |
| 65.0 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 |
| 67.5 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 |
| 70.0 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 |
| 72.5 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 |
| 75.0 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 |
| 77.5 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 |
| 80.0 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 |
| 82.5 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 |
| 85.0 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 |
| 87.5 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 |
| 90.0 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 |
| 92.5 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 |
| 95.0 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 |
| 97.5 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 |
| 100.0 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 |
| 102.5 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 |
| 105.0 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 |
| 107.5 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 |
| 110.0 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 |
| 112.5 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 |
| 115.0 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 |
| 117.5 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 |
| 120.0 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 |
| 122.5 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 |
| 125.0 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 |
| 127.5 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 |
| 130.0 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 |
| 132.5 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_IES

CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 135.0 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 |
| 137.5 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 |
| 140.0 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 |
| 142.5 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 |
| 145.0 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 |
| 147.5 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 |
| 150.0 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 |
| 152.5 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 |
| 155.0 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 |
| 157.5 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 |
| 160.0 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 |
| 162.5 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 |
| 165.0 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 |
| 167.5 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 |
| 170.0 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 |
| 172.5 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 |
| 175.0 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 |
| 177.5 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 |
| 180.0 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 |

Vert. Angles Horizontal Angles

| | <u>225.0</u> | <u>247.5</u> | <u>270.0</u> | <u>292.5</u> | <u>315.0</u> | <u>337.5</u> | <u>360.0</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 | 993.300 |
| 2.5 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 | 987.600 |
| 5.0 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 | 977.600 |
| 7.5 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 | 970.900 |
| 10.0 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 | 965.200 |
| 12.5 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 | 961.900 |
| 15.0 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 | 954.300 |
| 17.5 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 | 941.400 |
| 20.0 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 | 922.700 |
| 22.5 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 | 885.700 |
| 25.0 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 | 822.900 |
| 27.5 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 | 737.600 |
| 30.0 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 | 630.000 |
| 32.5 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 | 512.300 |
| 35.0 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 | 420.400 |
| 37.5 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 | 364.600 |
| 40.0 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 | 329.700 |
| 42.5 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 | 303.900 |
| 45.0 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 | 281.200 |
| 47.5 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 | 259.200 |
| 50.0 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 | 236.500 |
| 52.5 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 | 213.200 |
| 55.0 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 | 189.900 |
| 57.5 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 | 167.100 |
| 60.0 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 | 145.000 |
| 62.5 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 | 124.800 |
| 65.0 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 | 106.300 |
| 67.5 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 | 89.170 |
| 70.0 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 | 73.280 |
| 72.5 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 | 59.320 |
| 75.0 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 | 47.210 |
| 77.5 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 | 36.500 |
| 80.0 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 | 26.980 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_IES****CANDELA TABULATION - (Cont.)**

| | | | | | | | |
|--------------|----------|----------|----------|----------|----------|----------|----------|
| 82.5 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 | 18.330 |
| 85.0 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 | 10.360 |
| 87.5 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 | 3.610 |
| 90.0 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 | 0.651 |
| 92.5 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 | 0.182 |
| 95.0 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 | 0.273 |
| 97.5 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 | 0.364 |
| 100.0 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 |
| 102.5 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 |
| 105.0 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 | 1.002 |
| 107.5 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 | 1.458 |
| 110.0 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 | 2.004 |
| 112.5 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 | 2.642 |
| 115.0 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 | 3.644 |
| 117.5 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 | 4.919 |
| 120.0 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 | 6.650 |
| 122.5 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 | 9.110 |
| 125.0 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 | 12.572 |
| 127.5 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 | 17.673 |
| 130.0 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 | 24.415 |
| 132.5 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 | 32.614 |
| 135.0 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 | 42.088 |
| 137.5 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 | 59.488 |
| 140.0 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 | 105.494 |
| 142.5 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 | 157.148 |
| 145.0 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 | 360.301 |
| 147.5 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 | 647.903 |
| 150.0 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 | 913.733 |
| 152.5 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 | 1072.247 |
| 155.0 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 | 1286.332 |
| 157.5 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 | 1526.836 |
| 160.0 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 | 1741.832 |
| 162.5 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 | 1918.566 |
| 165.0 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 | 2118.075 |
| 167.5 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 | 2372.244 |
| 170.0 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 | 2726.623 |
| 172.5 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 | 3254.093 |
| 175.0 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 | 3618.493 |
| 177.5 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 | 3700.482 |
| 180.0 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 | 3655.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 361.78 | N.A. | 10.70 |
| 0-30 | 730.71 | N.A. | 21.60 |
| 0-40 | 1006.15 | N.A. | 29.80 |
| 0-60 | 1393.34 | N.A. | 41.30 |
| 0-80 | 1550.36 | N.A. | 45.90 |
| 0-90 | 1562.9 | N.A. | 46.30 |
| 10-90 | 1469.92 | N.A. | 43.50 |
| 20-40 | 644.36 | N.A. | 19.10 |
| 20-50 | 861.67 | N.A. | 25.50 |
| 40-70 | 493.30 | N.A. | 14.60 |
| 60-80 | 157.02 | N.A. | 4.70 |
| 70-80 | 50.91 | N.A. | 1.50 |
| 80-90 | 12.54 | N.A. | 0.40 |
| 90-110 | 1.56 | N.A. | 0.00 |
| 90-120 | 5.39 | N.A. | 0.20 |
| 90-130 | 17.55 | N.A. | 0.50 |
| 90-150 | 307.65 | N.A. | 9.10 |
| 90-180 | 1812.84 | N.A. | 53.70 |
| 110-180 | 1811.28 | N.A. | 53.70 |
| 0-180 | 3375.74 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 92.99 |
| 10-20 | 268.80 |
| 20-30 | 368.92 |
| 30-40 | 275.44 |
| 40-50 | 217.31 |
| 50-60 | 169.89 |
| 60-70 | 106.11 |
| 70-80 | 50.91 |
| 80-90 | 12.54 |
| 90-100 | 0.39 |
| 100-110 | 1.18 |
| 110-120 | 3.83 |
| 120-130 | 12.16 |
| 130-140 | 37.81 |
| 140-150 | 252.29 |
| 150-160 | 591.59 |
| 160-170 | 598.73 |
| 170-180 | 314.86 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 106 | 106 | 106 | 106 | 98 | 98 | 98 | 98 | 81 | 81 | 81 | 66 | 66 | 66 | 53 | 53 | 53 | 46 |
| 1 | 98 | 94 | 90 | 87 | 90 | 87 | 84 | 81 | 73 | 71 | 69 | 60 | 58 | 57 | 48 | 47 | 46 | 41 |
| 2 | 90 | 83 | 78 | 73 | 83 | 77 | 72 | 68 | 65 | 61 | 58 | 54 | 51 | 49 | 44 | 42 | 41 | 36 |
| 3 | 83 | 74 | 67 | 62 | 76 | 69 | 63 | 58 | 58 | 54 | 50 | 49 | 46 | 43 | 40 | 38 | 36 | 32 |
| 4 | 76 | 66 | 59 | 54 | 70 | 62 | 55 | 50 | 52 | 48 | 44 | 44 | 41 | 38 | 36 | 34 | 32 | 28 |
| 5 | 71 | 60 | 52 | 47 | 65 | 56 | 49 | 44 | 48 | 43 | 39 | 40 | 37 | 34 | 33 | 31 | 29 | 25 |
| 6 | 65 | 54 | 47 | 41 | 60 | 50 | 44 | 39 | 43 | 38 | 35 | 37 | 33 | 30 | 31 | 28 | 26 | 23 |
| 7 | 61 | 49 | 42 | 37 | 56 | 46 | 39 | 35 | 40 | 35 | 31 | 34 | 30 | 27 | 28 | 26 | 24 | 21 |
| 8 | 57 | 45 | 38 | 33 | 52 | 42 | 36 | 31 | 37 | 32 | 28 | 31 | 28 | 25 | 26 | 24 | 22 | 19 |
| 9 | 53 | 42 | 34 | 30 | 49 | 39 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 23 | 25 | 22 | 20 | 18 |
| 10 | 50 | 38 | 32 | 27 | 46 | 36 | 30 | 26 | 31 | 27 | 23 | 27 | 23 | 21 | 23 | 20 | 18 | 16 |

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_IES

UGR TABLE - CORRECTED

Reflectances

| | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Ceiling Cavity | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Walls | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Floor Cavity | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

Room Size UGR Viewed Crosswise

| | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| X=2H | Y=2H | 15.6 | 16.4 | 16.6 | 17.4 | 18.7 | 15.6 | 16.4 | 16.6 | 17.4 | 18.7 |
| | 3H | 16.8 | 17.5 | 17.8 | 18.5 | 19.8 | 16.8 | 17.5 | 17.8 | 18.5 | 19.8 |
| | 4H | 17.2 | 17.8 | 18.2 | 18.8 | 20.2 | 17.2 | 17.8 | 18.2 | 18.8 | 20.2 |
| | 6H | 17.4 | 18.0 | 18.4 | 19.0 | 20.4 | 17.4 | 18.0 | 18.4 | 19.0 | 20.4 |
| | 8H | 17.5 | 18.0 | 18.5 | 19.1 | 20.4 | 17.5 | 18.0 | 18.5 | 19.1 | 20.4 |
| | 12H | 17.5 | 18.0 | 18.5 | 19.0 | 20.4 | 17.5 | 18.0 | 18.5 | 19.0 | 20.4 |

UGR Viewed Endwise

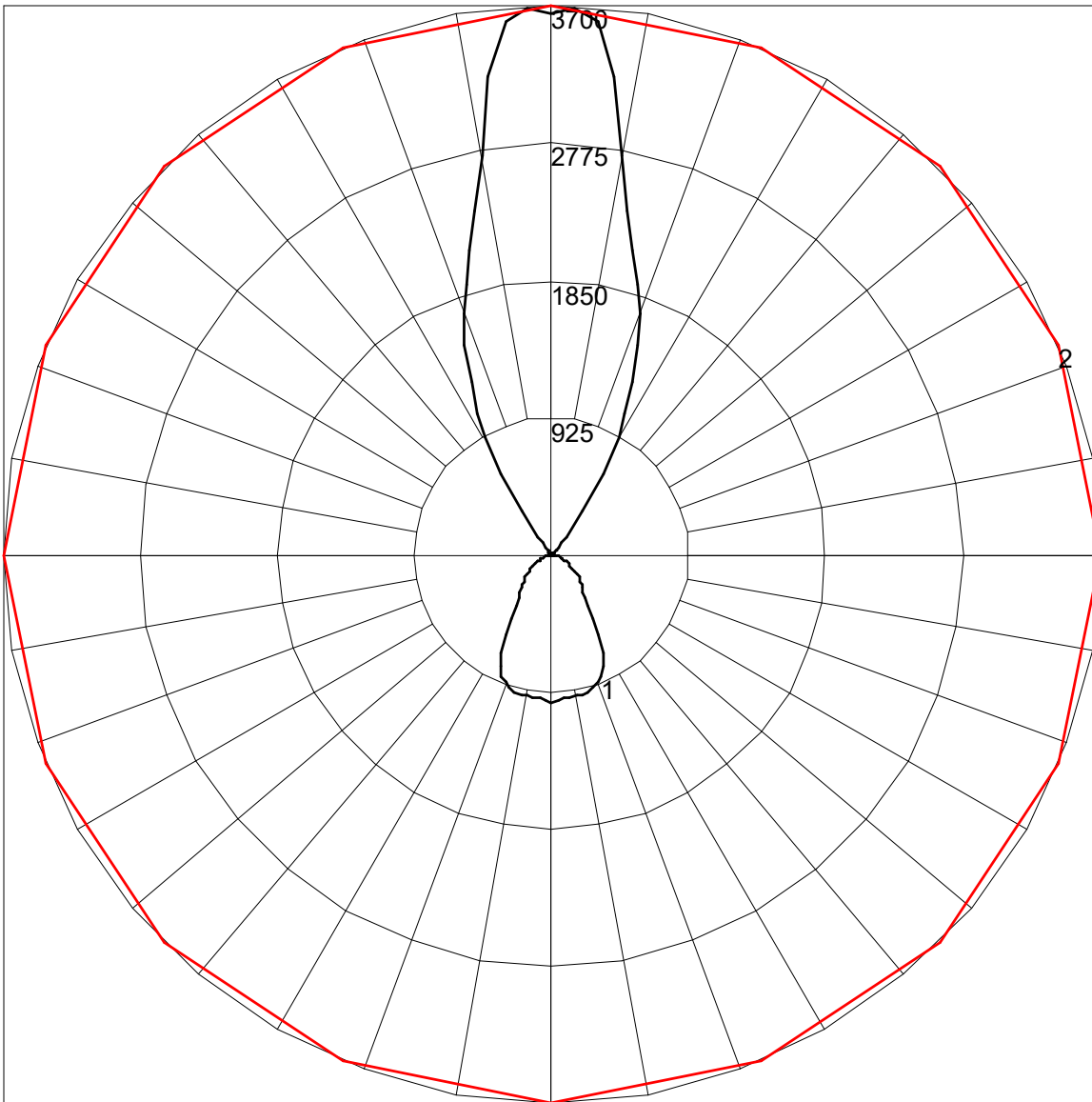
| | | | | | | | | | | | |
|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H | 2H | 16.0 | 16.6 | 17.0 | 17.6 | 19.0 | 16.0 | 16.6 | 17.0 | 17.6 | 19.0 |
| | 3H | 17.3 | 17.9 | 18.4 | 18.9 | 20.3 | 17.3 | 17.9 | 18.4 | 18.9 | 20.3 |
| | 4H | 17.8 | 18.3 | 18.9 | 19.3 | 20.7 | 17.8 | 18.3 | 18.9 | 19.3 | 20.7 |
| | 6H | 18.2 | 18.6 | 19.2 | 19.6 | 21.0 | 18.2 | 18.6 | 19.2 | 19.6 | 21.0 |
| | 8H | 18.3 | 18.6 | 19.3 | 19.7 | 21.1 | 18.3 | 18.6 | 19.3 | 19.7 | 21.1 |
| | 12H | 18.3 | 18.6 | 19.4 | 19.7 | 21.1 | 18.3 | 18.6 | 19.4 | 19.7 | 21.1 |
| 8H | 4H | 17.9 | 18.3 | 19.0 | 19.4 | 20.8 | 17.9 | 18.3 | 19.0 | 19.4 | 20.8 |
| | 6H | 18.4 | 18.7 | 19.5 | 19.8 | 21.2 | 18.4 | 18.7 | 19.5 | 19.8 | 21.2 |
| | 8H | 18.5 | 18.8 | 19.6 | 19.9 | 21.3 | 18.5 | 18.8 | 19.6 | 19.9 | 21.3 |
| | 12H | 18.6 | 18.9 | 19.7 | 19.9 | 21.4 | 18.6 | 18.9 | 19.7 | 19.9 | 21.4 |
| 12H | 4H | 17.9 | 18.3 | 19.0 | 19.3 | 20.7 | 17.9 | 18.3 | 19.0 | 19.3 | 20.7 |
| | 6H | 18.4 | 18.7 | 19.5 | 19.7 | 21.2 | 18.4 | 18.7 | 19.5 | 19.7 | 21.2 |
| | 8H | 18.6 | 18.8 | 19.7 | 19.9 | 21.3 | 18.6 | 18.8 | 19.7 | 19.9 | 21.3 |

Maximum UGR = 21.4

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-835U-L20-835D-XXX-DIM1-UNV-OM-CSU-LW-WHD-WM_.IES

POLAR GRAPH



Maximum Candela = 3700.482 Located At Horizontal Angle = 0, Vertical Angle = 177.5

1 - Vertical Plane Through Horizontal Angles (90 - 270)

2 - Horizontal Cone Through Vertical Angle (177.5) (Through Max. Cd.)