



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L20-B40DTW-DIMTW-UNV-OW-OF-CS-TD_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20686.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIE, INC

[ISSUEDATE] 03/30/2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 6"RND LED RECESSED CAST HOUSING DOWNLIGHT

[MORE] OPEN SEMI-SPEC SPUN ALUM REFL w/DOMED DIFF TOP LENS(WIDE)

[LUMCAT] 6DR-TL-L20-B40DTW-DIMTW-UNV-OW-OF-CS-TD

[LAMPCAT] BIOS GEN 2 COB

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1267
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	52
Total Luminaire Watts	24.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.08
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.48 ft (Diameter)
Luminous Width (90-270)	0.48 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	15493	15493	15493
55	1696	1696	1696
65	363	363	363
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0</u>
0	832.084
5	860.392
10	922.155
15	950.463
20	959.042
25	934.165
30	796.914
35	485.526
40	295.090
45	183.573
50	96.934
55	16.299
60	5.147
65	2.573
70	0.000
75	0.000
80	0.000
85	0.000
90	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6DR-TL-L20-B40DTW-DIMTW-UNV-OW-OF-CS-TD_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	352.45	N.A.	27.80
0-30	770.08	N.A.	60.80
0-40	1089.17	N.A.	86.00
0-60	1264.06	N.A.	99.80
0-80	1266.59	N.A.	100.00
0-90	1266.59	N.A.	100.00
10-90	1182.59	N.A.	93.40
20-40	736.72	N.A.	58.20
20-50	882.03	N.A.	69.60
40-70	177.41	N.A.	14.00
60-80	2.53	N.A.	0.20
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1266.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	84.00
10-20	268.45
20-30	417.63
30-40	319.09
40-50	145.31
50-60	29.58
60-70	2.53
70-80	0.00
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	94	93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78
4	95	87	81	76	93	86	80	76	83	79	75	81	77	74	79	76	73	71
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66
6	84	75	68	64	83	74	68	63	72	67	63	71	66	62	70	65	62	60
7	80	70	63	58	78	69	63	58	68	62	58	66	61	58	65	61	57	56
8	75	65	58	54	74	64	58	54	63	58	53	62	57	53	61	56	53	52
9	71	61	54	50	70	60	54	50	59	54	50	58	53	49	57	53	49	48
10	67	57	51	46	66	56	50	46	56	50	46	55	50	46	54	49	46	44

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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

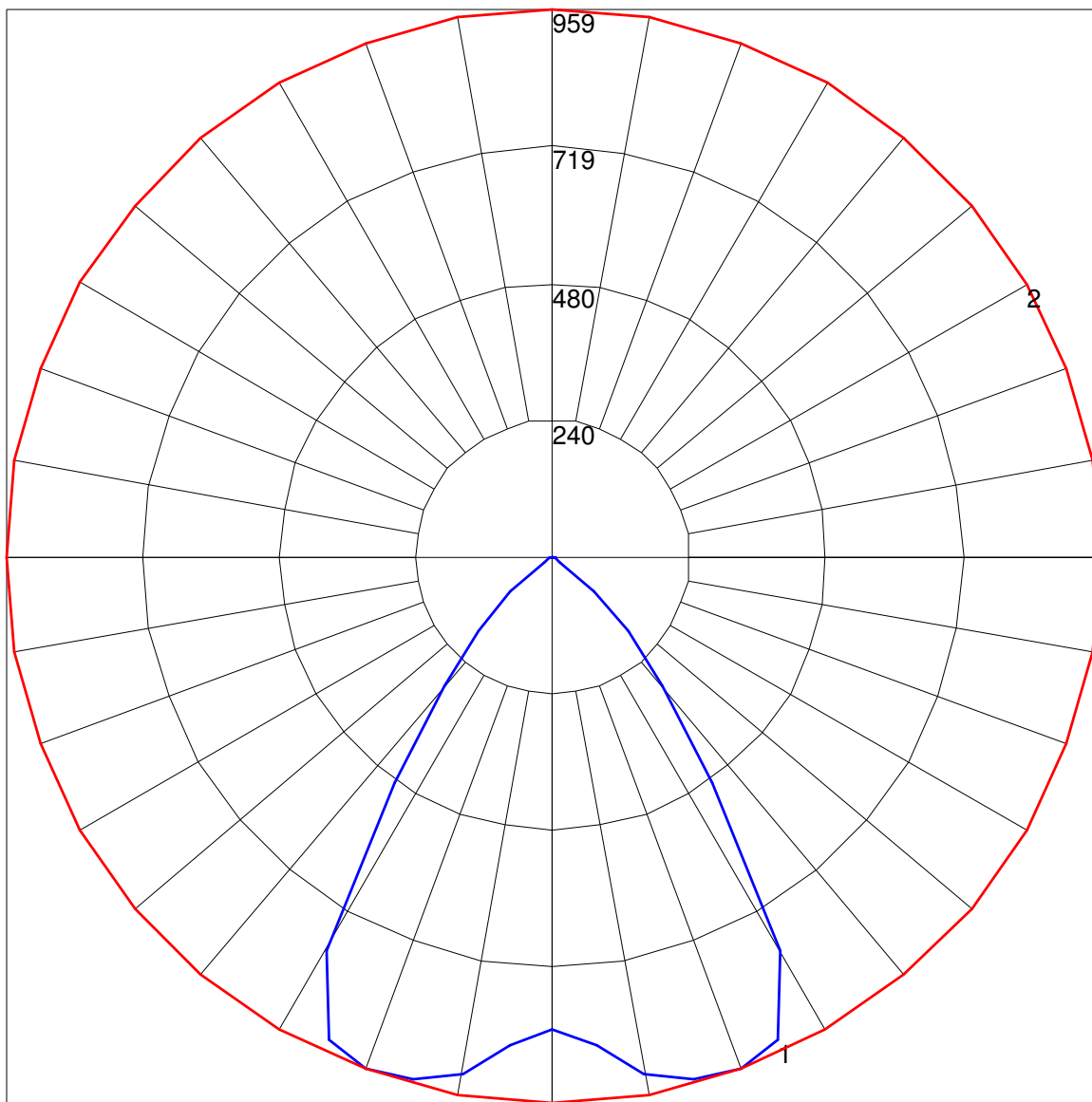
X=2H	Y=2H	2.1	3.2	2.4	3.5	3.8	2.1	3.2	2.4	3.5	3.8
	3H	1.9	2.9	2.3	3.2	3.6	1.9	2.9	2.3	3.2	3.6
	4H	1.8	2.7	2.2	3.1	3.4	1.8	2.7	2.2	3.1	3.4
	6H	1.7	2.5	2.2	2.9	3.3	1.7	2.5	2.2	2.9	3.3
	8H	1.7	2.4	2.1	2.8	3.2	1.7	2.4	2.1	2.8	3.2
	12H	1.6	2.3	2.1	2.7	3.2	1.6	2.3	2.1	2.7	3.2

UGR Viewed Endwise

4H	2H	1.9	2.8	2.3	3.1	3.5	1.9	2.8	2.3	3.1	3.5
	3H	1.8	2.5	2.2	2.9	3.3	1.8	2.5	2.2	2.9	3.3
	4H	1.6	2.3	2.1	2.7	3.1	1.6	2.3	2.1	2.7	3.1
	6H	1.5	2.1	2.0	2.5	3.0	1.5	2.1	2.0	2.5	3.0
	8H	1.5	2.0	1.9	2.4	2.9	1.5	2.0	1.9	2.4	2.9
	12H	1.4	1.8	1.9	2.3	2.8	1.4	1.8	1.9	2.3	2.8
8H	4H	1.5	2.0	1.9	2.4	2.9	1.5	2.0	1.9	2.4	2.9
	6H	1.3	1.7	1.8	2.2	2.7	1.3	1.7	1.8	2.2	2.7
	8H	1.3	1.6	1.8	2.1	2.6	1.3	1.6	1.8	2.1	2.6
	12H	1.2	1.5	1.7	2.0	2.6	1.2	1.5	1.7	2.0	2.6
12H	4H	1.4	1.8	1.9	2.3	2.8	1.4	1.8	1.9	2.3	2.8
	6H	1.3	1.6	1.8	2.1	2.6	1.3	1.6	1.8	2.1	2.6
	8H	1.2	1.5	1.7	2.0	2.6	1.2	1.5	1.7	2.0	2.6

Maximum UGR = 3.8

POLAR GRAPH



Maximum Candela = 959.042 Located At Horizontal Angle = 0, Vertical Angle = 20
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (20) (Through Max. Cd.)