



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L15-835-DIM-UNV-OW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TESTLAB] Photopia see: www.ltioptics.com/ies
 [ISSUEDATE] 10/18/2019
 [TESTDATE] OCTOBER 18 2019
 [TEST] H. E. WILLIAMS PHOTOMETRIC REPORT #W00531
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMINAIRE] 6" RECESSED DOWNLIGHT W/WHITE REFL
 [LUMCAT] 6DR-TL-L15-835-DIM-UNV-OW-OF-WH
 [LAMP] LED 16.8W Vero COB array
 [LAMPCAT] BXRC-30E2000
 [OTHER] THIS DATA IS BASED ON IN-HOUSE COMPUTER
 [OTHER] SIMULATIONS AND IS PROVIDED AS A GOOD-FAITH
 [OTHER] ESTIMATE OF PHOTOMETRIC PERFORMANCE.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1337
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	14.78
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	0.96
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	0.46 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	17514	17237	17237
55	16023	16136	16250
65	12955	12801	12647
75	9570	9822	9822
85	5983	5235	5983

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CANDELA TABULATION

	<u>0</u>	<u>23</u>	<u>45</u>	<u>68</u>	<u>90</u>
0	887	887	887	887	887
5	894	895	895	895	892
10	880	885	890	882	885
15	864	867	868	871	872
20	858	851	852	855	857
25	834	828	834	832	822
30	753	760	756	756	761
35	259	256	258	258	258
40	196	193	194	196	193
45	190	188	187	189	187
50	174	172	173	172	171
55	141	141	142	141	143
60	111	110	110	109	110
65	84	82	83	82	82
70	58	59	58	59	59
75	38	39	39	38	39
80	22	22	21	21	22
85	8	8	7	8	8
90	0	0	0	0	0

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	330.90	N.A.	24.70
0-30	708.50	N.A.	53.00
0-40	933.36	N.A.	69.80
0-60	1203.38	N.A.	90.00
0-80	1327.39	N.A.	99.20
0-90	1337.46	N.A.	100.00
10-90	1252.51	N.A.	93.60
20-40	602.46	N.A.	45.00
20-50	746.13	N.A.	55.80
40-70	352.53	N.A.	26.40
60-80	124.01	N.A.	9.30
70-80	41.51	N.A.	3.10
80-90	10.07	N.A.	0.80
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	1337.46	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	84.95
10-20	245.95
20-30	377.60
30-40	224.86
40-50	143.67
50-60	126.35
60-70	82.50
70-80	41.51
80-90	10.07
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	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	67	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	75	63	56	51	73	62	55	51	61	55	50	60	54	50	58	53	50	48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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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	19.2	20.5	19.6	20.8	21.2	19.2	20.5	19.6	20.8	21.1
	3H	20.5	21.7	20.9	22.0	22.4	20.5	21.7	20.9	22.0	22.4
	4H	21.0	22.1	21.4	22.4	22.8	21.0	22.1	21.4	22.4	22.8
	6H	21.3	22.3	21.7	22.7	23.1	21.3	22.3	21.7	22.7	23.1
	8H	21.4	22.3	21.8	22.7	23.1	21.4	22.3	21.8	22.7	23.1
	12H	21.4	22.3	21.8	22.7	23.1	21.4	22.3	21.8	22.7	23.1

UGR Viewed Endwise

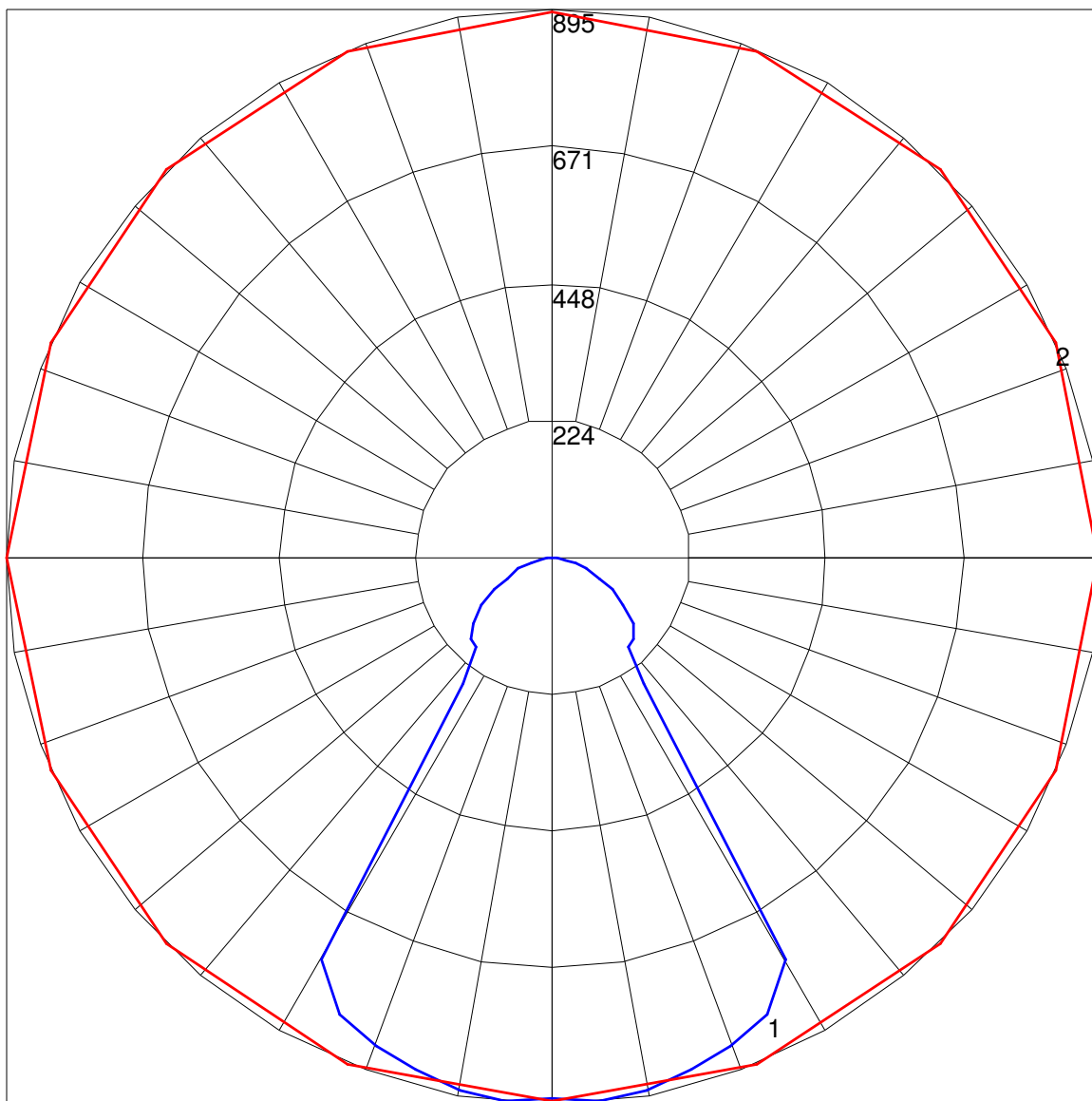
4H	2H	19.6	20.7	20.0	21.1	21.5	19.6	20.7	20.0	21.1	21.5
	3H	21.2	22.1	21.6	22.5	22.9	21.2	22.1	21.6	22.5	22.9
	4H	21.7	22.5	22.2	23.0	23.4	21.7	22.5	22.2	22.9	23.4
	6H	22.1	22.8	22.6	23.3	23.8	22.1	22.8	22.6	23.3	23.7
	8H	22.3	22.9	22.7	23.4	23.8	22.2	22.9	22.7	23.3	23.8
	12H	22.3	22.9	22.8	23.4	23.9	22.3	22.9	22.8	23.4	23.8

8H	4H	21.9	22.6	22.4	23.0	23.5	21.9	22.5	22.4	23.0	23.5
	6H	22.4	22.9	22.9	23.4	23.9	22.4	22.9	22.9	23.4	23.9
	8H	22.6	23.1	23.1	23.6	24.1	22.5	23.0	23.1	23.5	24.0
	12H	22.7	23.1	23.2	23.6	24.2	22.7	23.1	23.2	23.6	24.1

12H	4H	21.9	22.5	22.4	23.0	23.4	21.9	22.5	22.4	23.0	23.4
	6H	22.4	22.9	22.9	23.4	23.9	22.4	22.9	22.9	23.3	23.9
	8H	22.6	23.1	23.1	23.5	24.1	22.6	23.0	23.1	23.5	24.1

Maximum UGR = 24.2

POLAR GRAPH



Maximum Candela = 895 Located At Horizontal Angle = 23, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (23 - 203) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)