IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L60-8TW-DIM-UNV-OW-OF-CS_4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 20685.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2026-10-14
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4" RND RECESSED LED DOWNLIGHT
[MORE] OPEN SEMI-SPEC SPUN ALUMINUM REFLECTOR (WIDE)
[LUMCAT] 4DR-TL-L60-8TW-DIM-UNV-OW-OF-CS_4000K_
[LAMPCAT] BRIDGELUX V13 BXRE
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6109
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	51.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	0.94
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.37 ft (Diameter)
Luminous Width (90-270)	0.37 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	18525	18525	18525
55	5709	5709	5709
65	705	705	705
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	0
0	5242.906
5	5399.324
10	5561.535
15	5677.401
20	5929.408
25	6462.388
30	5063.314
35	889.266
40	231.731
45	127.452
50	66.623
55	31.863
60	14.483
65	2.897
70	2.897
75	0.000
80	0.000
85	0.000
90	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2142.58	N.A.	35.10
0-30	4900.84	N.A.	80.20
0-40	5964.43	N.A.	97.60
0-60	6102.27	N.A.	99.90
0-80	6108.72	N.A.	100.00
0-90	6108.72	N.A.	100.00
10-90	5589.4	N.A.	91.50
20-40	3821.85	N.A.	62.60
20-50	3927.57	N.A.	64.30
40-70	143.54	N.A.	2.30
60-80	6.45	N.A.	0.10
70-80	0.76	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	6108.72	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	519.33
10-20	1623.25
20-30	2758.26
30-40	1063.59
40-50	105.72
50-60	32.13
60-70	5.69
70-80	0.76
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	114	111	109	106	111	109	107	105	105	103	102	101	100	98	98	97	96	94
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	81	78	77
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67
7	84	75	69	65	83	75	69	65	73	68	65	72	68	64	71	67	64	63
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59
9	76	67	61	57	75	66	61	57	66	60	57	65	60	57	64	60	57	55
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52

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UGR TABLE - CORRECTED

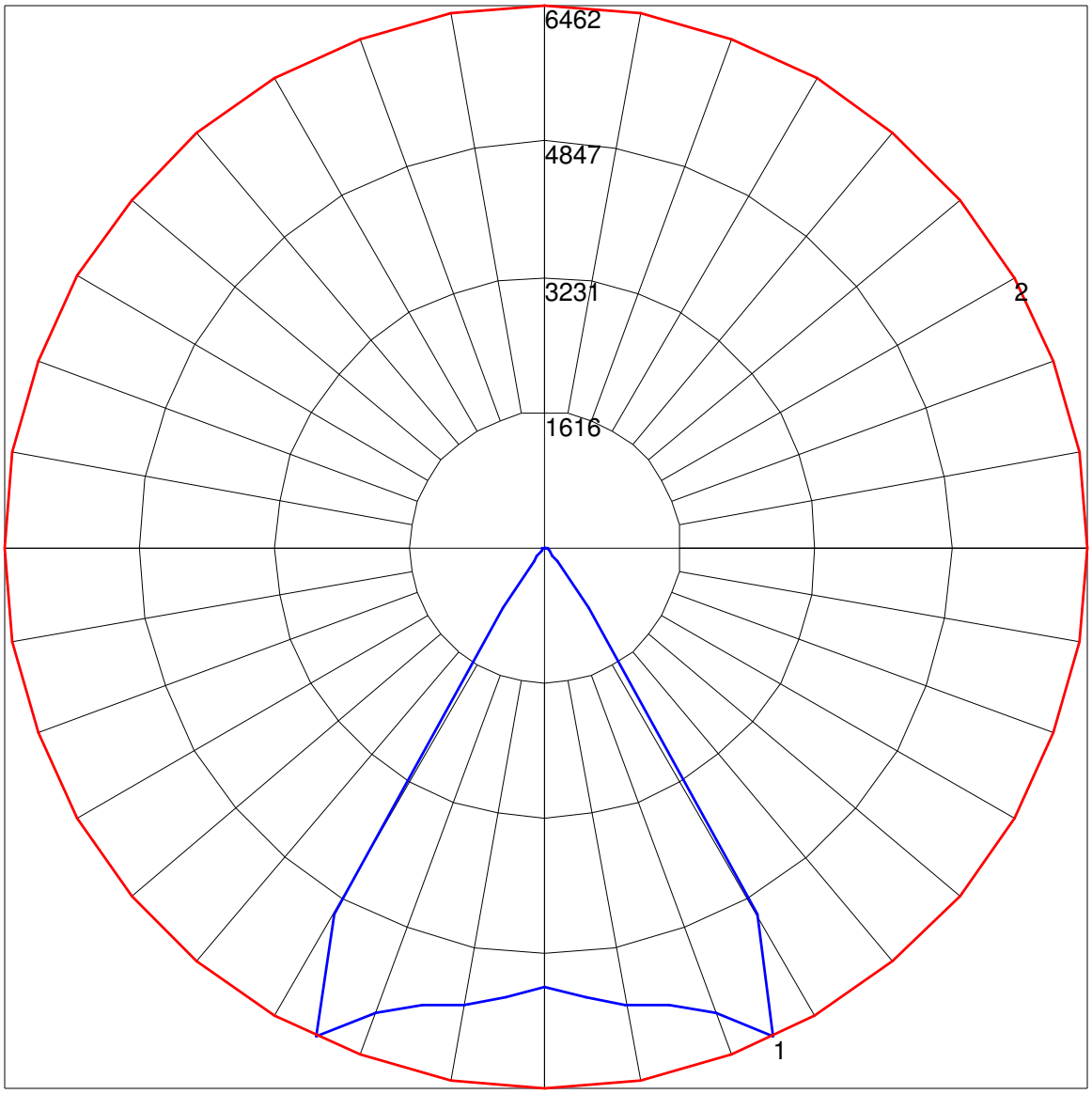
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	3H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	4H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	6H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	8H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	12H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
4H	2H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	3H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	4H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	6H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	8H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	12H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
8H	4H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	6H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	8H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	12H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
12H	4H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	6H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	8H	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3

Maximum UGR = 6.3

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POLAR GRAPH



Maximum Candela = 6462.388 Located At Horizontal Angle = 0, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)

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