IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.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-L15-8TW-DIM-UNV-OW-OF-CS_3500K_
[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	1548
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	13.7
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	4695	4695	4695
55	1447	1447	1447
65	178	178	178
75	0	0	0
85	0	0	0

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.IES

CANDELA TABULATION

	0
0	1328.844
5	1368.489
10	1409.602
15	1438.969
20	1502.842
25	1637.929
30	1283.325
35	225.390
40	58.733
45	32.303
50	16.886
55	8.076
60	3.671
65	0.734
70	0.734
75	0.000
80	0.000
85	0.000
90	0.000

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	543.05	N.A.	35.10
0-30	1242.14	N.A.	80.20
0-40	1511.72	N.A.	97.60
0-60	1546.66	N.A.	99.90
0-80	1548.29	N.A.	100.00
0-90	1548.29	N.A.	100.00
10-90	1416.66	N.A.	91.50
20-40	968.67	N.A.	62.60
20-50	995.46	N.A.	64.30
40-70	36.38	N.A.	2.30
60-80	1.63	N.A.	0.10
70-80	0.19	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	1548.29	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	131.63
10-20	411.42
20-30	699.10
30-40	269.57
40-50	26.80
50-60	8.14
60-70	1.44
70-80	0.19
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.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	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	99	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	88	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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.IES

UGR TABLE - CORRECTED

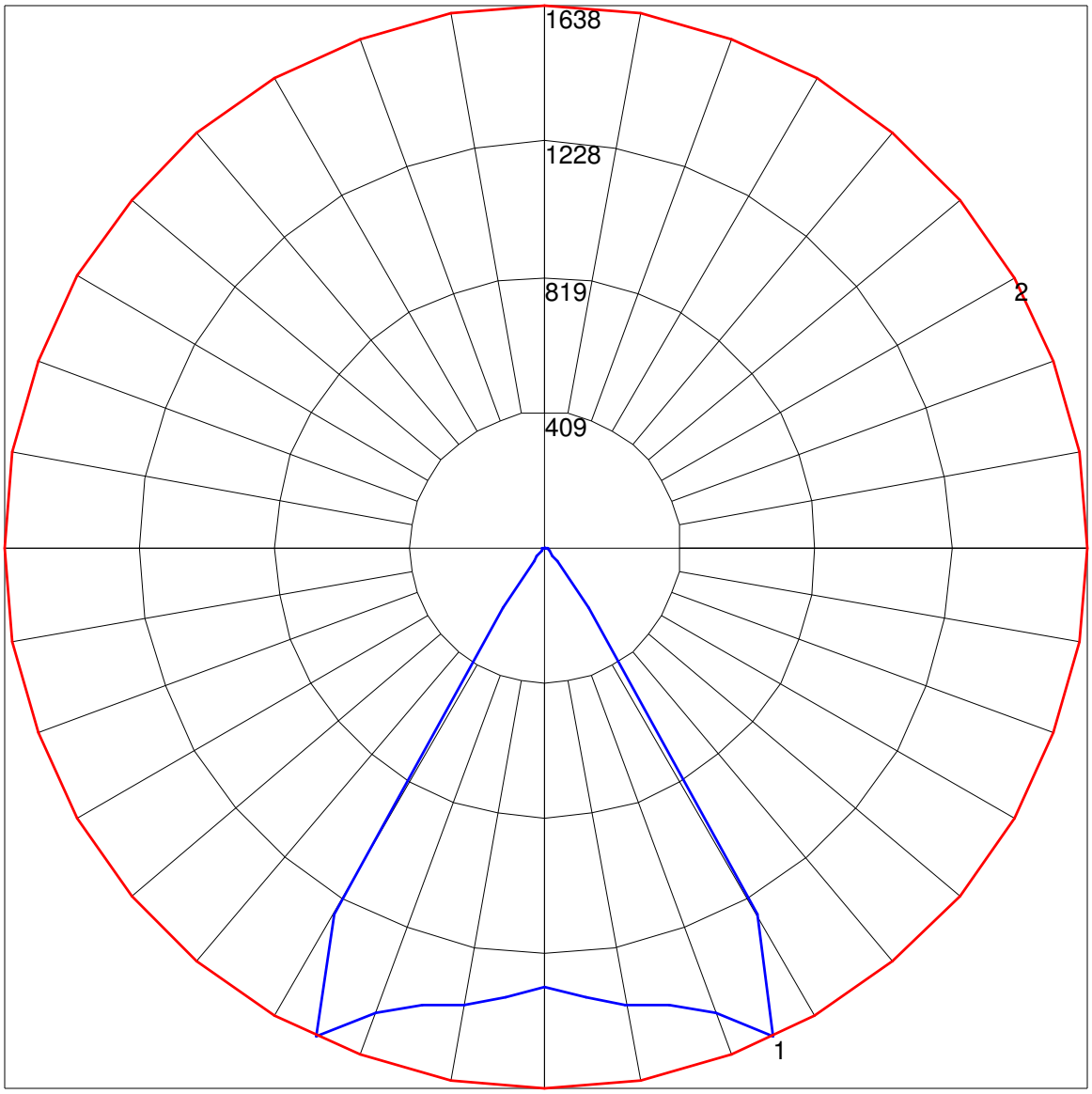
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	3H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	4H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	6H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	8H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	12H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
4H	2H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	3H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	4H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	6H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	8H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	12H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
8H	4H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	6H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	8H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	12H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
12H	4H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	6H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	8H	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Maximum UGR = 1.5

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-DIM-UNV-OW-OF-CS_3500K_.IES

POLAR GRAPH



Maximum Candela = 1637.929 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.)

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.