IES INDOOR REPORT
PHOTOMETRIC FILENAME : 4DR-TL-L15-8TW-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-L15-8TW-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	1564
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
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	4743	4743	4743
55	1462	1462	1462
65	180	180	180
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_4000K_.IES

CANDELA TABULATION

	0
0	1342.267
5	1382.312
10	1423.841
15	1453.504
20	1518.022
25	1654.473
30	1296.288
35	227.666
40	59.327
45	32.630
50	17.056
55	8.157
60	3.708
65	0.742
70	0.742
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_4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	548.53	N.A.	35.10
0-30	1254.69	N.A.	80.20
0-40	1526.99	N.A.	97.60
0-60	1562.28	N.A.	99.90
0-80	1563.93	N.A.	100.00
0-90	1563.93	N.A.	100.00
10-90	1430.97	N.A.	91.50
20-40	978.45	N.A.	62.60
20-50	1005.52	N.A.	64.30
40-70	36.75	N.A.	2.30
60-80	1.65	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	1563.93	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	132.96
10-20	415.58
20-30	706.16
30-40	272.30
40-50	27.07
50-60	8.22
60-70	1.46
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_4000K_.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	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

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_4000K_.IES

UGR TABLE - CORRECTED

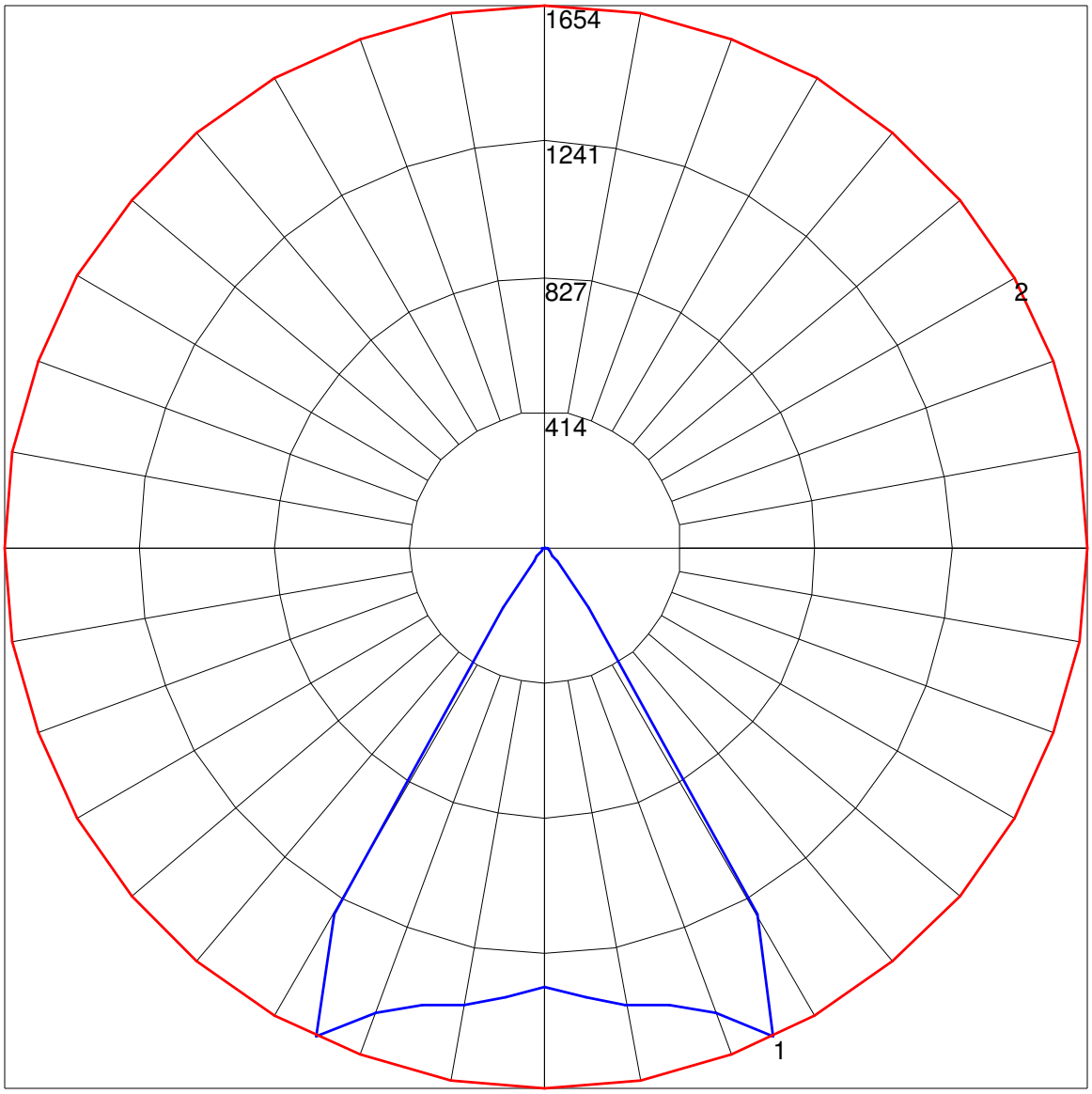
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	3H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	4H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	6H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	8H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	12H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
4H	2H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	3H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	4H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	6H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	8H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	12H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
8H	4H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	6H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	8H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	12H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
12H	4H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	6H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	8H	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

Maximum UGR = 1.6

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_4000K_.IES

POLAR GRAPH



Maximum Candela = 1654.473 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.