



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DS-L20-8TW-DIM-UNV-OWW-OF-CS.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN from BALLABS TEST NO. 20314.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 16-APR-2018

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] GEN7 V13 LED 4"SHORT HEATSINK 4"SQ CAST HOUSING DOWNLIGHT

[MORE] WHITE MIXING CHAMBER & SEMISPEC WALLWASH TRIM w/FROST FIL

[MORE] ADVANCE #XI025C070V054DSM1 @ 625mA

[LUMCAT] 4DS-L20-8TW-DIM-UNV-OWW-OF-CS

[LAMPCAT] BXRE-352000

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1561
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.86
Spacing Criterion (90-270)	0.84
Spacing Criterion (Diagonal)	0.88
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	55229	32481	16301
55	41092	12598	2849
65	33788	3664	0
75	18612	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0	1652.481	1652.481	1652.481	1652.481	1652.481	1652.481	1652.481	1652.481	1652.481
5	1650.707	1638.289	1642.724	1642.724	1643.611	1641.837	1645.385	1645.385	1644.498
10	1560.233	1556.685	1573.538	1575.312	1573.538	1577.086	1597.487	1605.470	1602.809
15	1407.669	1408.556	1421.861	1432.505	1415.652	1449.358	1484.838	1491.934	1475.081
20	1199.224	1226.721	1227.608	1233.817	1192.128	1240.913	1305.664	1279.941	1226.721
25	961.508	993.440	1005.858	941.107	920.706	955.299	1049.321	996.101	929.576
30	728.227	735.323	745.967	632.431	601.386	686.538	758.385	697.182	650.171
35	549.940	543.731	514.460	408.020	362.783	451.483	499.381	472.771	425.760
40	474.545	441.726	336.173	250.134	213.767	259.004	299.806	306.902	295.371
45	402.698	369.879	236.829	145.468	118.858	135.711	171.191	162.321	158.773
50	315.772	283.840	154.338	74.508	66.525	65.638	81.604	74.508	73.621
55	243.038	211.993	74.508	28.384	16.853	23.062	27.497	23.949	18.627
60	183.609	159.660	35.480	3.548	0.000	0.887	7.096	2.661	2.661
65	147.242	117.084	15.966	0.000	0.000	0.000	0.000	0.000	0.000
70	104.666	72.734	4.435	0.000	0.000	0.000	0.000	0.000	0.000
75	49.672	32.819	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.887	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	555.20	N.A.	35.60
0-30	998.84	N.A.	64.00
0-40	1299.78	N.A.	83.30
0-60	1526.99	N.A.	97.80
0-80	1561.16	N.A.	100.00
0-90	1561.18	N.A.	100.00
10-90	1406.46	N.A.	90.10
20-40	744.58	N.A.	47.70
20-50	905.88	N.A.	58.00
40-70	253.32	N.A.	16.20
60-80	34.17	N.A.	2.20
70-80	8.06	N.A.	0.50
80-90	0.02	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	1561.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	154.72
10-20	400.48
20-30	443.65
30-40	300.94
40-50	161.30
50-60	65.92
60-70	26.11
70-80	8.06
80-90	0.02
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

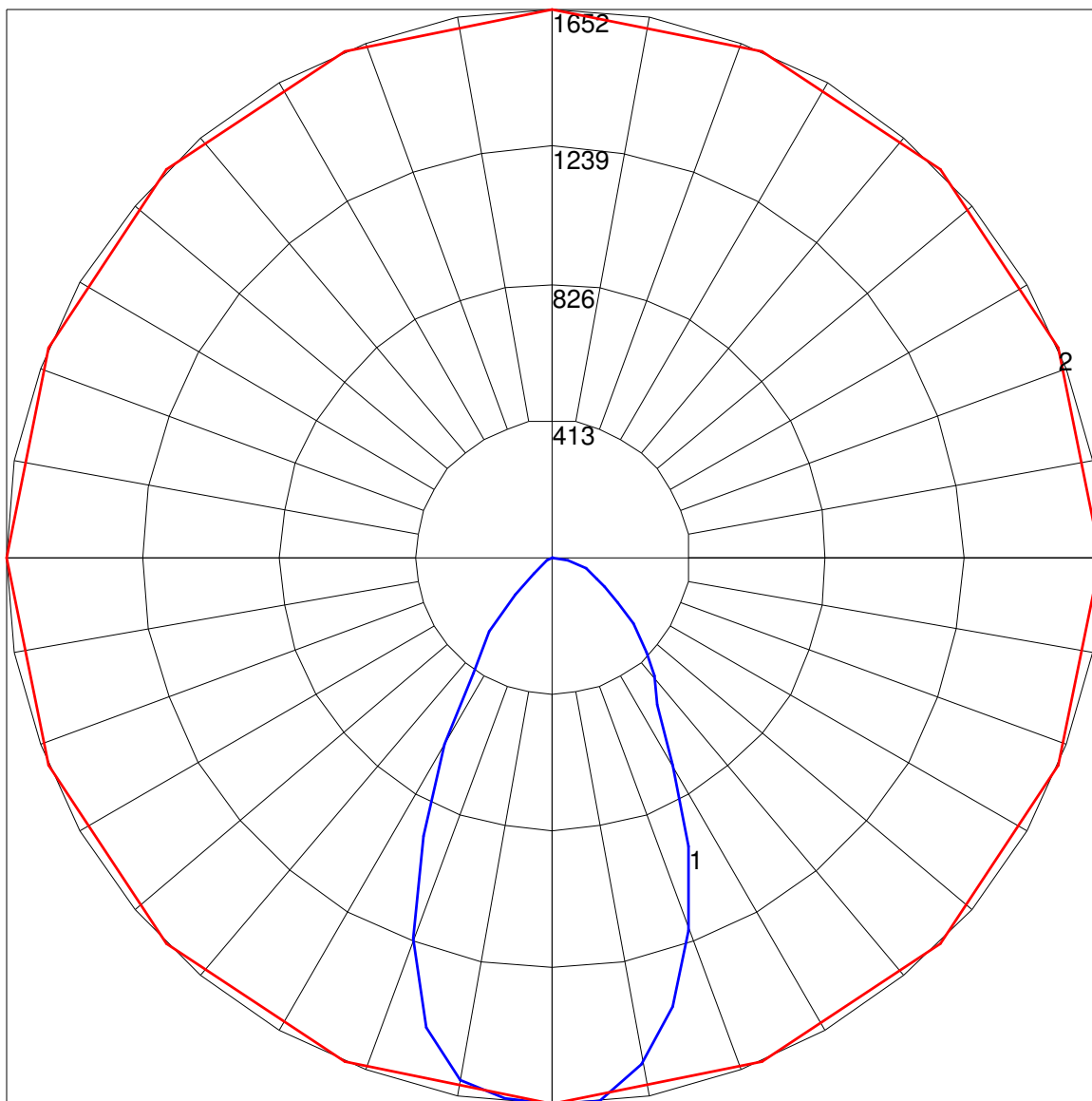
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	106	106	106	103	103	103	103	99	99	99	94	94	94	91	91	91	89
1	100	98	95	93	98	96	94	92	92	90	89	89	87	86	86	85	84	82
2	95	90	86	83	93	89	85	82	86	83	80	83	81	78	80	79	77	75
3	89	83	79	75	88	82	78	74	80	76	73	77	74	72	75	73	71	69
4	84	77	72	68	83	76	71	68	74	70	67	72	69	66	71	68	65	64
5	80	72	66	62	78	71	66	62	69	65	61	68	64	61	66	63	60	59
6	76	67	61	57	74	66	61	57	65	60	57	64	60	56	63	59	56	55
7	72	63	57	53	70	62	57	53	61	56	53	60	56	52	59	55	52	51
8	68	59	53	49	67	58	53	49	57	53	49	56	52	49	56	52	49	47
9	65	55	50	46	63	55	50	46	54	49	46	53	49	46	53	49	46	44
10	61	52	47	43	60	52	47	43	51	46	43	50	46	43	50	46	43	42

POLAR GRAPH



Maximum Candela = 1652.481 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)