



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L20-830-DIM-UNV-OW-OF-BL_PHOTOPIA.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TESTLAB] GEN FROM Photopia 2021.0.0 see: www.ltiopics.com/ies
 [ISSUE DATE] 12-10-2021
 [TEST DATE] Fri Dec 10 15:39:06 2021
 [TEST] HEW PHOTOMETRIC REPORT #W00539
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 4DR-TL-L20-830-DIM-UNV-OW-OF-BL
 [LUMINAIRE] 4 INCH ROUND RECESSED LED DOWNLIGHT
 [MORE] WITH WIDE DIST OPEN BLACK TRIM
 [LAMP] LED 16.8W Vero COB array (500mA)
 [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	926
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	47
Total Luminaire Watts	19.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.88
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.46 ft
Luminous Width (90-270)	0.46 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	568	638	638
55	437	437	437
65	356	356	356
75	194	194	194
85	0	0	0

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L20-830-DIM-UNV-OW-OF-BL_PHOTOPIA.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1066.125	1066.125	1066.125	1066.125	1066.125
5	1065.145	1052.406	1078.864	1046.527	1061.225
10	1076.904	1068.085	1055.346	1053.386	1054.366
15	1026.929	1039.668	1055.346	1049.467	1025.949
20	1012.231	1011.251	1011.251	1014.191	1005.371
25	985.774	971.075	963.236	981.854	984.794
30	638.891	645.750	635.951	631.052	629.092
35	25.477	25.477	26.457	25.477	25.477
40	8.819	8.819	8.819	8.819	8.819
45	7.839	8.819	8.819	7.839	8.819
50	6.859	6.859	6.859	6.859	6.859
55	4.899	4.899	4.899	4.899	4.899
60	3.920	3.920	3.920	3.920	3.920
65	2.940	2.940	2.940	2.940	2.940
70	1.960	1.960	1.960	1.960	1.960
75	0.980	0.980	0.980	0.980	0.980
80	0.980	0.980	0.980	0.980	0.980
85	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L20-830-DIM-UNV-OW-OF-BL_PHOTOPIA.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	395.35	N.A.	42.70
0-30	807.72	N.A.	87.20
0-40	911.03	N.A.	98.30
0-60	921.92	N.A.	99.50
0-80	926.12	N.A.	100.00
0-90	926.39	N.A.	100.00
10-90	825.10	N.A.	89.10
20-40	515.69	N.A.	55.70
20-50	521.98	N.A.	56.30
40-70	13.79	N.A.	1.50
60-80	4.20	N.A.	0.50
70-80	1.29	N.A.	0.10
80-90	0.27	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	926.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	101.29
10-20	294.06
20-30	412.38
30-40	103.31
40-50	6.29
50-60	4.60
60-70	2.91
70-80	1.29
80-90	0.27
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L20-830-DIM-UNV-OW-OF-BL_PHOTOPIA.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	107	112	109	107	105	105	104	102	101	100	99	98	97	96	94
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	83
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	79
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70
7	86	78	72	68	85	77	72	68	76	71	68	75	71	67	74	70	67	66
8	83	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	64	62
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59
10	76	67	61	58	75	66	61	57	65	61	57	65	60	57	64	60	57	56

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L20-830-DIM-UNV-OW-OF-BL_PHOTOPIA.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

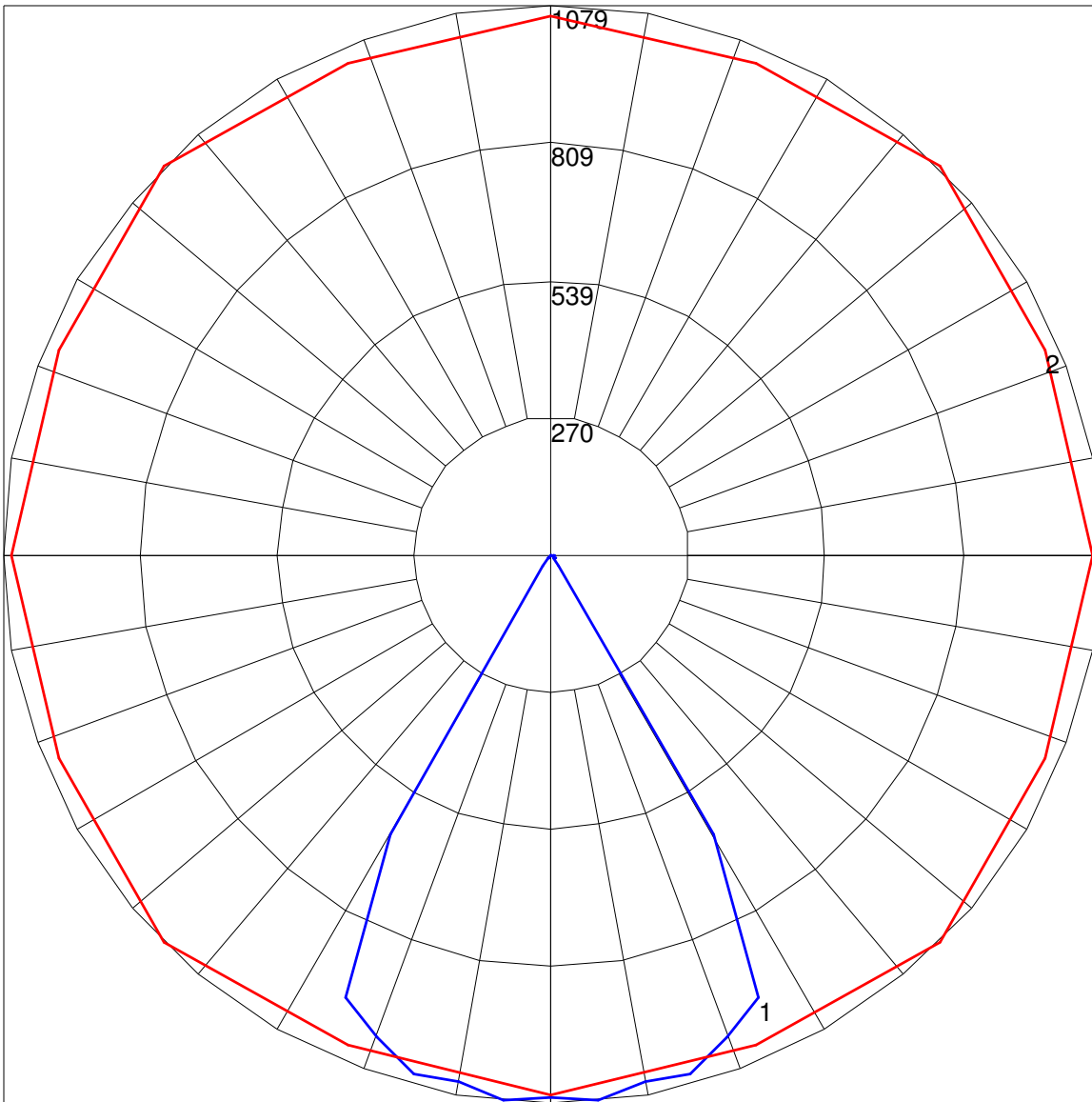
X=2H	Y=2H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3H	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
	4H	0.0	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.6
	6H	0.0	0.1	0.0	0.5	0.9	0.0	0.1	0.0	0.9
	8H	0.0	0.2	0.0	0.6	1.0	0.0	0.2	0.0	1.0
	12H	0.0	0.1	0.0	0.5	0.9	0.0	0.1	0.0	0.9

UGR Viewed Endwise

4H	2H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3H	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.8
	4H	0.0	0.2	0.1	0.6	1.1	0.0	0.2	0.1	1.1
	6H	0.2	0.6	0.7	1.1	1.6	0.2	0.6	0.7	1.6
	8H	0.3	0.7	0.8	1.2	1.7	0.3	0.7	0.8	1.7
	12H	0.3	0.6	0.8	1.1	1.6	0.3	0.6	0.8	1.6
8H	4H	0.0	0.2	0.2	0.6	1.1	0.0	0.2	0.2	1.1
	6H	0.4	0.8	0.9	1.3	1.7	0.4	0.8	0.9	1.7
	8H	0.6	0.9	1.1	1.4	1.9	0.6	0.9	1.1	1.9
	12H	0.6	0.8	1.1	1.3	1.9	0.6	0.8	1.1	1.9
12H	4H	0.0	0.1	0.2	0.6	1.1	0.0	0.1	0.2	1.1
	6H	0.4	0.7	1.0	1.2	1.8	0.4	0.7	1.0	1.8
	8H	0.6	0.9	1.2	1.4	2.0	0.6	0.9	1.2	2.0

Maximum UGR = 2.0

POLAR GRAPH



Maximum Candela = 1078.864 Located At Horizontal Angle = 45, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)