



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CRDI-TL-L20-8TWU-L20-8TWD-XXX-DALI-UNV-OW-CSU-LM-WHD-WM 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from UL #13537338.03
 [TESTLAB] UL Verification Services Inc.
 [ISSUE DATE] 24-FEB-2021
 [MANUFAC] WILLIAMS INDOOR
 [MORE] H.E. WILLIAMS, INC. - CARTHAGE, MO
 [LUMCAT] 8CRDI-TL-L20-8TWU-L20-8TWD-xxx-DALI-UNV-OW-CSU-LM-WHD-WM 4000k
 [LUMINAIRE] White formed aluminum housing, wide distribution reflector
 [MORE] trims, clear uplight glass lens enclosure, no downlight enclosure
 [LAMP] Two white LEDs (one up/one down)
 [SEARCH_SOURCETYPE] LED
 [SEARCH_APPLICATION] INDOOR, DIRECT, INDIRECT
 [SEARCH_MOUNTING] WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4302
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	48
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.65 ft (Diameter)
Luminous Width (90-270)	0.65 ft (Diameter)
Luminous Height	2.17 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	902	902	902
55	490	490	490
65	279	279	279
75	136	136	136
85	30	30	30

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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	4999.207	4999.207	4999.207	4999.207	4999.207	4999.207	4999.207	4999.207	4999.207
5	4803.295	4803.295	4803.295	4803.295	4803.295	4803.295	4803.295	4803.295	4803.295
10	4219.017	4219.017	4219.017	4219.017	4219.017	4219.017	4219.017	4219.017	4219.017
15	3143.807	3143.807	3143.807	3143.807	3143.807	3143.807	3143.807	3143.807	3143.807
20	1887.667	1887.667	1887.667	1887.667	1887.667	1887.667	1887.667	1887.667	1887.667
25	976.101	976.101	976.101	976.101	976.101	976.101	976.101	976.101	976.101
30	489.203	489.203	489.203	489.203	489.203	489.203	489.203	489.203	489.203
35	255.261	255.261	255.261	255.261	255.261	255.261	255.261	255.261	255.261
40	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893
45	102.450	102.450	102.450	102.450	102.450	102.450	102.450	102.450	102.450
50	77.673	77.673	77.673	77.673	77.673	77.673	77.673	77.673	77.673
55	60.848	60.848	60.848	60.848	60.848	60.848	60.848	60.848	60.848
60	47.710	47.710	47.710	47.710	47.710	47.710	47.710	47.710	47.710
65	36.532	36.532	36.532	36.532	36.532	36.532	36.532	36.532	36.532
70	26.736	26.736	26.736	26.736	26.736	26.736	26.736	26.736	26.736
75	18.208	18.208	18.208	18.208	18.208	18.208	18.208	18.208	18.208
80	10.602	10.602	10.602	10.602	10.602	10.602	10.602	10.602	10.602
85	4.033	4.033	4.033	4.033	4.033	4.033	4.033	4.033	4.033
90	4.562	4.562	4.562	4.562	4.562	4.562	4.562	4.562	4.562
95	4.785	4.785	4.785	4.785	4.785	4.785	4.785	4.785	4.785
100	5.789	5.789	5.789	5.789	5.789	5.789	5.789	5.789	5.789
105	7.162	7.162	7.162	7.162	7.162	7.162	7.162	7.162	7.162
110	9.035	9.035	9.035	9.035	9.035	9.035	9.035	9.035	9.035
115	11.846	11.846	11.846	11.846	11.846	11.846	11.846	11.846	11.846
120	16.397	16.397	16.397	16.397	16.397	16.397	16.397	16.397	16.397
125	24.830	24.830	24.830	24.830	24.830	24.830	24.830	24.830	24.830
130	39.453	39.453	39.453	39.453	39.453	39.453	39.453	39.453	39.453
135	62.843	62.843	62.843	62.843	62.843	62.843	62.843	62.843	62.843
140	250.337	250.337	250.337	250.337	250.337	250.337	250.337	250.337	250.337
145	889.783	889.783	889.783	889.783	889.783	889.783	889.783	889.783	889.783
150	1574.772	1574.772	1574.772	1574.772	1574.772	1574.772	1574.772	1574.772	1574.772
155	1867.574	1867.574	1867.574	1867.574	1867.574	1867.574	1867.574	1867.574	1867.574
160	1829.760	1829.760	1829.760	1829.760	1829.760	1829.760	1829.760	1829.760	1829.760
165	1731.714	1731.714	1731.714	1731.714	1731.714	1731.714	1731.714	1731.714	1731.714
170	1659.433	1659.433	1659.433	1659.433	1659.433	1659.433	1659.433	1659.433	1659.433
175	1514.538	1514.538	1514.538	1514.538	1514.538	1514.538	1514.538	1514.538	1514.538
180	1404.506	1404.506	1404.506	1404.506	1404.506	1404.506	1404.506	1404.506	1404.506

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CRDI-TL-L20-8TWU-L20-8TWD-XXX-DALI-UNV-OW-CSU-LM-WHD-WM 4000K_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1291.36	N.A.	30.00
0-30	1777.16	N.A.	41.30
0-40	1954.21	N.A.	45.40
0-60	2092.36	N.A.	48.60
0-80	2148.32	N.A.	49.90
0-90	2154.65	N.A.	50.10
10-90	1714.7	N.A.	39.90
20-40	662.85	N.A.	15.40
20-50	745.78	N.A.	17.30
40-70	174.65	N.A.	4.10
60-80	55.96	N.A.	1.30
70-80	19.46	N.A.	0.50
80-90	6.33	N.A.	0.10
90-110	13.13	N.A.	0.30
90-120	25.28	N.A.	0.60
90-130	48.79	N.A.	1.10
90-150	680.59	N.A.	15.80
90-180	2147.12	N.A.	49.90
110-180	2133.99	N.A.	49.60
0-180	4301.77	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	439.94
10-20	851.42
20-30	485.79
30-40	177.06
40-50	82.93
50-60	55.21
60-70	36.50
70-80	19.46
80-90	6.33
90-100	5.43
100-110	7.70
110-120	12.15
120-130	23.51
130-140	78.66
140-150	553.14
150-160	823.41
160-170	494.68
170-180	148.44

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	100	97	94	91	93	90	87	85	77	75	73	65	64	63	53	53	52	47
2	94	88	83	79	87	82	78	75	71	68	66	60	59	57	51	50	49	44
3	88	81	75	71	82	75	71	67	66	62	59	57	54	52	48	47	46	42
4	82	74	68	63	77	70	64	60	61	57	54	53	51	49	46	44	43	40
5	78	69	62	58	72	65	59	55	57	53	50	50	47	45	44	42	40	38
6	73	64	57	53	68	60	55	51	54	50	47	48	45	42	42	40	38	36
7	69	60	53	49	65	57	51	47	51	47	43	45	42	40	40	38	36	34
8	66	56	50	45	62	53	48	44	48	44	41	43	40	38	39	36	35	33
9	62	53	47	43	59	50	45	41	46	41	39	41	38	36	37	35	33	31
10	59	50	44	40	56	48	42	39	43	39	36	39	36	34	36	33	32	30

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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

X=2H	Y=2H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	3H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	4H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	6H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	8H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	12H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

UGR Viewed Endwise

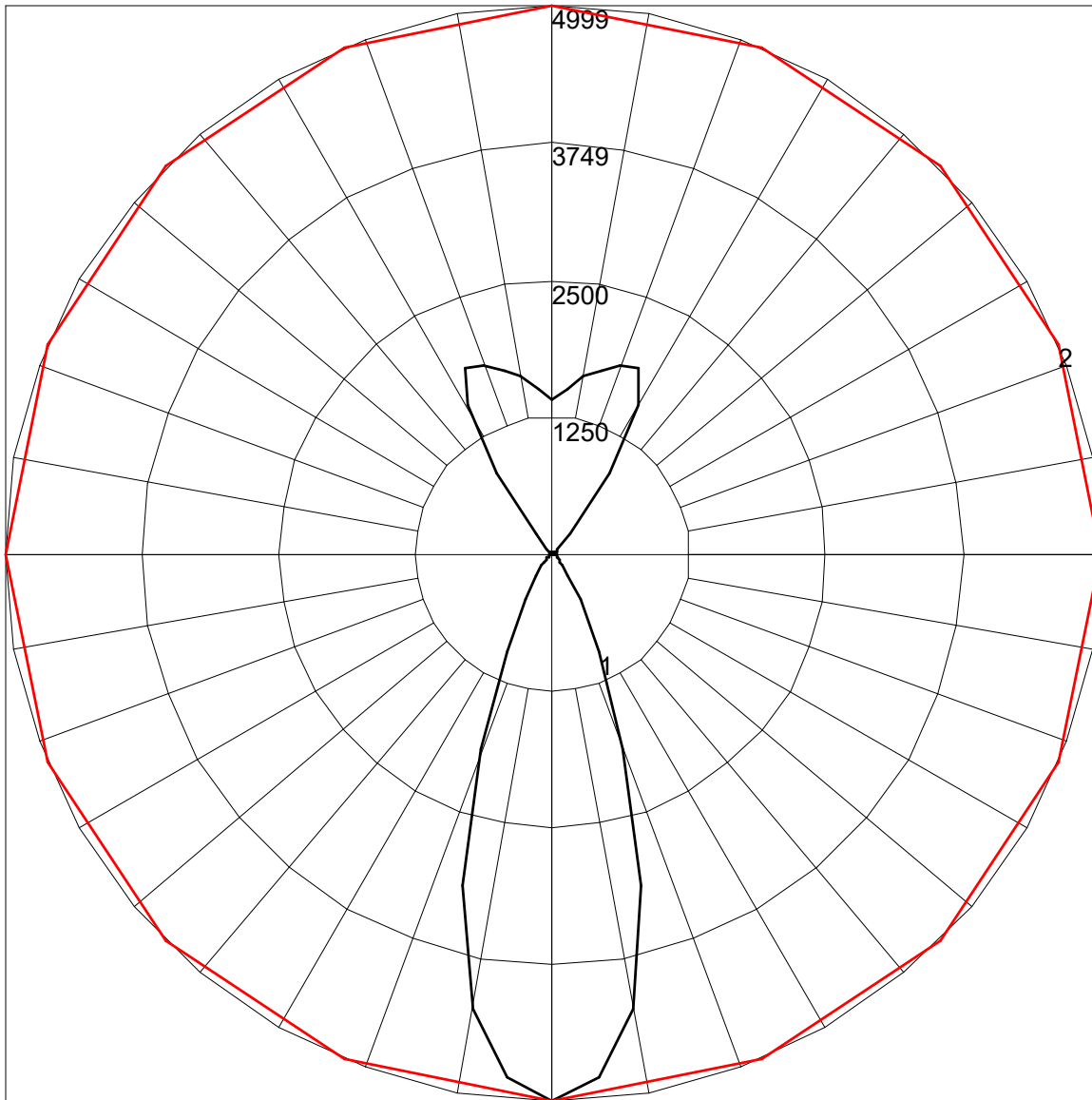
4H	2H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	3H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	4H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	6H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	8H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	12H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
8H	4H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	6H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	8H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	12H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
12H	4H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	6H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
	8H	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

Maximum UGR = 5.1

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POLAR GRAPH



Maximum Candela = 4999.207 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (90 - 270)

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