

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P291772

Luminaire Tested: **22GR-LD5-20-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291772
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-F1-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2112.0 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

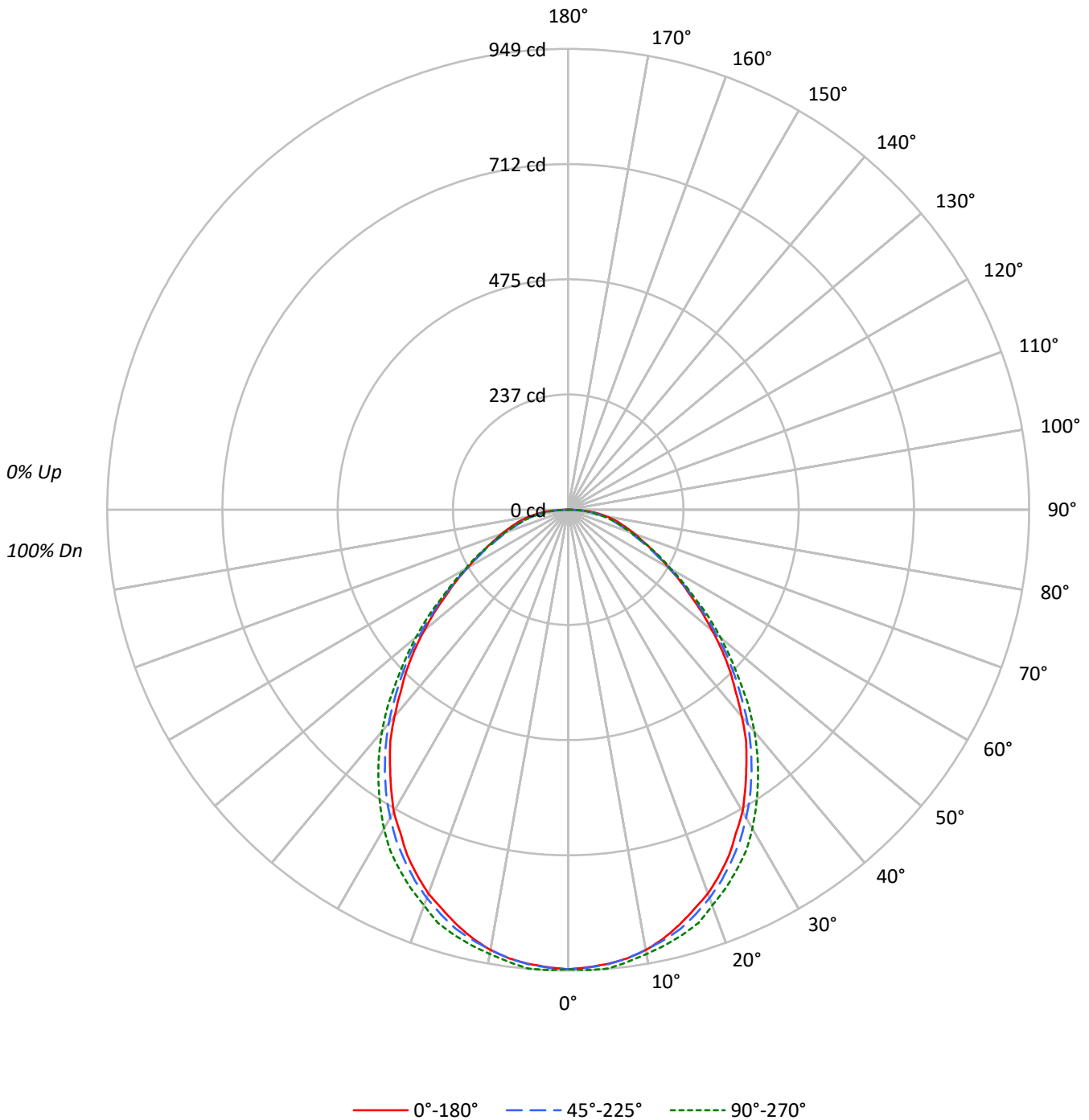
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2547	2547	2547
5°	2536	2538	2562
10°	2516	2514	2538
15°	2465	2489	2526
20°	2409	2437	2484
25°	2329	2366	2433
30°	2231	2276	2356
35°	2100	2161	2237
40°	1955	2021	2094
45°	1794	1846	1903
50°	1618	1659	1712
55°	1436	1470	1495
60°	1287	1290	1316
65°	1186	1146	1186
70°	1145	1061	1091
75°	1166	1039	1059
80°	1255	1089	1089
85°	1392	1155	1139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	4.2
10°-20°	251.8	11.9
20°-30°	367.5	17.4
30°-40°	411.5	19.5
40°-50°	374.5	17.7
50°-60°	281.9	13.3
60°-70°	183.9	8.7
70°-80°	110.3	5.2
80°-90°	41.4	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	708.6	33.6
0°-40°	1120.1	53.0
0°-60°	1776.4	84.1
0°-90°	2112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	939	937	940	943	948	89
15°	885	886	894	901	907	249
25°	784	787	797	812	819	360
35°	639	645	658	673	681	400
45°	472	476	485	495	500	363
55°	306	310	313	318	319	277
65°	186	184	180	183	186	186
75°	112	108	100	100	102	119
85°	45	44	37	35	37	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.4	946.4	946.4	946.4	946.4
2.5°	943.0	942.6	944.0	946.4	948.9
5°	938.7	937.2	939.6	943.0	948.4
7.5°	931.9	931.9	931.9	938.2	939.2
10°	920.7	921.7	920.2	926.5	929.0
12.5°	904.7	905.2	908.1	914.4	918.8
15°	884.8	885.8	893.6	900.8	906.7
17.5°	862.5	865.9	873.2	884.8	892.1
20°	841.2	845.0	850.9	863.5	867.4
22.5°	814.0	818.4	825.6	836.8	845.0
25°	784.4	786.8	797.0	811.6	819.3
27.5°	749.0	754.3	766.9	782.0	792.7
30°	718.0	720.9	732.5	750.0	758.2
32.5°	678.7	687.4	697.1	712.6	720.4
35°	639.4	645.2	657.8	673.3	681.1
37.5°	601.5	604.9	617.5	630.6	640.3
40°	556.4	562.7	575.3	589.4	596.2
42.5°	511.3	520.5	528.8	542.8	550.1
45°	471.5	476.4	485.1	495.3	500.1
47.5°	429.8	432.2	442.4	448.7	454.1
50°	386.6	389.5	396.3	402.6	408.9
52.5°	346.8	349.3	353.6	359.5	365.8
55°	306.1	310.5	313.4	317.7	318.7
57.5°	273.1	272.6	274.6	278.0	281.4
60°	239.2	240.1	239.6	243.0	244.5
62.5°	211.0	210.5	207.6	212.5	216.4
65°	186.3	184.3	180.0	182.9	186.3
67.5°	163.5	162.5	155.2	157.7	160.6
70°	145.5	142.1	134.9	136.3	138.7
72.5°	128.1	124.2	116.9	117.4	118.8
75°	112.1	108.2	99.9	100.4	101.9
77.5°	97.0	92.2	84.9	83.9	84.9
80°	81.0	76.6	70.3	67.4	70.3
82.5°	64.5	62.1	54.8	51.9	52.9
85°	45.1	43.7	37.4	35.4	36.9
87.5°	20.9	22.3	18.9	17.5	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)