

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: P291781

Luminaire Tested: **22GR-LD5-24-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291781
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-LD5-24-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: 2479.0 lumens
Efficiency: N/A
Efficacy: 133.9 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

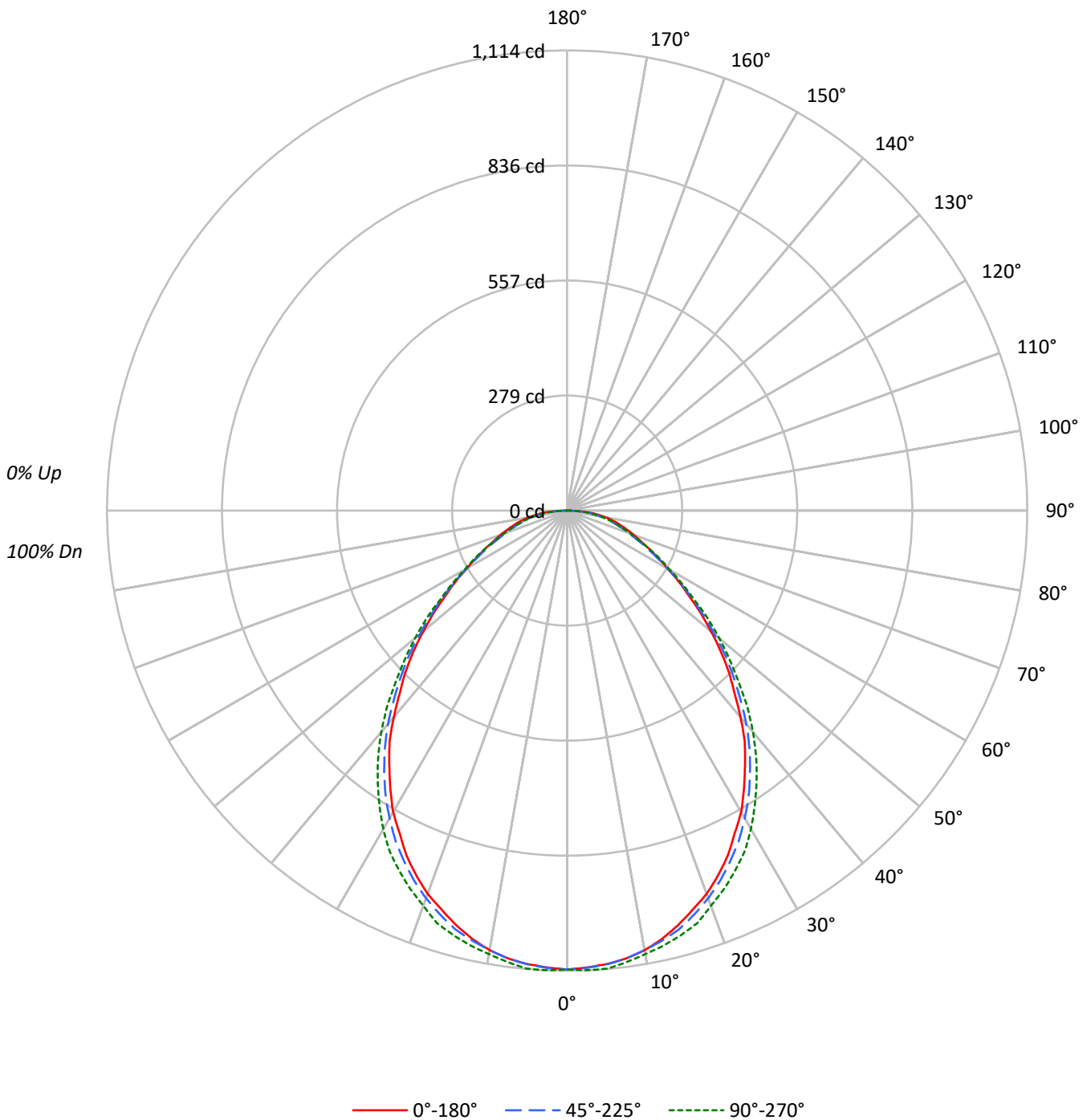
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2989	2989	2989
5°	2976	2979	3007
10°	2953	2951	2980
15°	2893	2922	2965
20°	2827	2860	2916
25°	2734	2778	2855
30°	2619	2672	2765
35°	2465	2536	2626
40°	2294	2372	2458
45°	2106	2167	2234
50°	1900	1948	2009
55°	1686	1726	1755
60°	1511	1514	1545
65°	1392	1345	1392
70°	1344	1245	1281
75°	1367	1220	1243
80°	1474	1280	1280
85°	1636	1352	1337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.8	4.2
10°-20°	295.6	11.9
20°-30°	431.4	17.4
30°-40°	483.0	19.5
40°-50°	439.5	17.7
50°-60°	330.8	13.3
60°-70°	215.9	8.7
70°-80°	129.5	5.2
80°-90°	48.6	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°	831.7	33.6
0°-40°	1314.7	53.0
0°-60°	2085.1	84.1
0°-90°	2479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2479.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1111	1111	1111	1111	1111	
5°	1102	1100	1103	1107	1113	105
15°	1039	1040	1049	1057	1064	292
25°	921	924	936	953	962	423
35°	750	757	772	790	799	469
45°	554	559	569	581	587	426
55°	359	364	368	373	374	325
65°	219	216	211	215	219	219
75°	132	127	117	118	120	140
85°	53	51	44	42	43	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.9	1110.9	1110.9	1110.9	1110.9
2.5°	1106.9	1106.3	1108.0	1110.9	1113.7
5°	1101.8	1100.1	1102.9	1106.9	1113.2
7.5°	1093.8	1093.8	1093.8	1101.2	1102.4
10°	1080.7	1081.9	1080.1	1087.5	1090.4
12.5°	1061.9	1062.5	1065.9	1073.3	1078.4
15°	1038.6	1039.7	1048.8	1057.4	1064.2
17.5°	1012.4	1016.4	1024.9	1038.6	1047.1
20°	987.3	991.9	998.7	1013.5	1018.1
22.5°	955.4	960.6	969.1	982.2	991.9
25°	920.7	923.6	935.5	952.6	961.7
27.5°	879.1	885.4	900.2	917.9	930.4
30°	842.7	846.1	859.8	880.3	890.0
32.5°	796.6	806.8	818.2	836.4	845.6
35°	750.5	757.3	772.1	790.3	799.4
37.5°	706.1	710.0	724.8	740.2	751.6
40°	653.1	660.5	675.3	691.8	699.8
42.5°	600.1	611.0	620.6	637.2	645.7
45°	553.5	559.1	569.4	581.4	587.0
47.5°	504.5	507.3	519.3	526.7	533.0
50°	453.8	457.2	465.2	472.6	480.0
52.5°	407.1	410.0	415.1	421.9	429.3
55°	359.3	364.4	367.8	373.0	374.1
57.5°	320.6	320.0	322.3	326.3	330.3
60°	280.7	281.9	281.3	285.3	287.0
62.5°	247.7	247.1	243.7	249.4	254.0
65°	218.6	216.4	211.2	214.7	218.6
67.5°	191.9	190.7	182.2	185.1	188.5
70°	170.8	166.8	158.3	160.0	162.8
72.5°	150.3	145.8	137.2	137.8	139.5
75°	131.5	127.0	117.3	117.9	119.6
77.5°	113.9	108.2	99.6	98.5	99.6
80°	95.1	90.0	82.6	79.1	82.6
82.5°	75.7	72.9	64.3	60.9	62.1
85°	53.0	51.2	43.8	41.6	43.3
87.5°	24.5	26.2	22.2	20.5	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)