

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: P291879

Luminaire Tested: **22GR-LD5-24-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291879
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-L92765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2211.0 lumens
Efficiency: N/A
Efficacy: 119.5 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

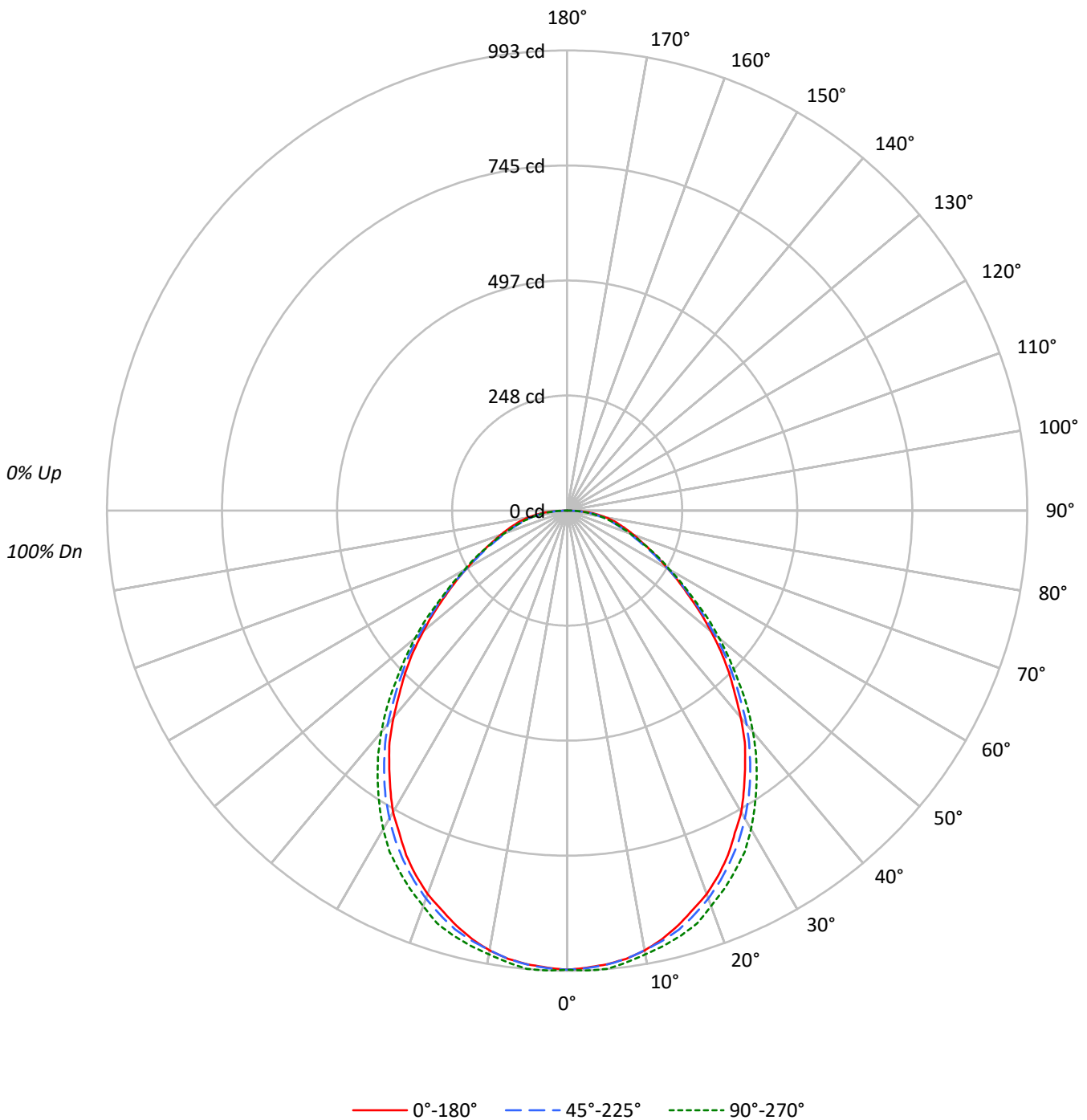
Input Watts (W): 18.507
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2666	2666	2666
5°	2655	2657	2682
10°	2634	2632	2657
15°	2581	2606	2644
20°	2522	2551	2600
25°	2438	2477	2547
30°	2335	2383	2467
35°	2199	2262	2342
40°	2046	2116	2192
45°	1878	1932	1993
50°	1694	1737	1792
55°	1503	1539	1566
60°	1348	1350	1378
65°	1242	1200	1242
70°	1199	1111	1142
75°	1220	1088	1108
80°	1314	1141	1141
85°	1457	1207	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	4.2
10°-20°	263.6	11.9
20°-30°	384.7	17.4
30°-40°	430.7	19.5
40°-50°	392.0	17.7
50°-60°	295.1	13.3
60°-70°	192.6	8.7
70°-80°	115.5	5.2
80°-90°	43.3	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°	741.8	33.6
0°-40°	1172.6	53.0
0°-60°	1859.6	84.1
0°-90°	2211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2211.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	983	981	984	987	993	93
15°	926	927	935	943	949	261
25°	821	824	834	850	858	377
35°	669	675	689	705	713	418
45°	494	499	508	518	524	380
55°	320	325	328	333	334	290
65°	195	193	188	192	195	195
75°	117	113	105	105	107	124
85°	47	46	39	37	39	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	990.8	990.8	990.8	990.8	990.8
2.5°	987.2	986.7	988.3	990.8	993.3
5°	982.7	981.1	983.7	987.2	992.8
7.5°	975.6	975.6	975.6	982.2	983.2
10°	963.9	964.9	963.4	970.0	972.5
12.5°	947.1	947.6	950.7	957.3	961.8
15°	926.3	927.3	935.4	943.1	949.2
17.5°	902.9	906.5	914.1	926.3	933.9
20°	880.6	884.7	890.8	904.0	908.0
22.5°	852.2	856.7	864.3	876.0	884.7
25°	821.2	823.7	834.4	849.6	857.7
27.5°	784.1	789.7	802.9	818.6	829.8
30°	751.6	754.7	766.8	785.1	793.8
32.5°	710.5	719.6	729.8	746.0	754.1
35°	669.3	675.4	688.6	704.9	713.0
37.5°	629.7	633.3	646.5	660.2	670.3
40°	582.5	589.1	602.3	617.0	624.1
42.5°	535.3	544.9	553.5	568.3	575.9
45°	493.6	498.7	507.8	518.5	523.6
47.5°	449.9	452.5	463.2	469.8	475.3
50°	404.7	407.8	414.9	421.5	428.1
52.5°	363.1	365.6	370.2	376.3	382.9
55°	320.4	325.0	328.1	332.6	333.7
57.5°	285.9	285.4	287.4	291.0	294.5
60°	250.4	251.4	250.9	254.4	256.0
62.5°	220.9	220.4	217.4	222.4	226.5
65°	195.0	193.0	188.4	191.5	195.0
67.5°	171.1	170.1	162.5	165.0	168.1
70°	152.4	148.8	141.2	142.7	145.2
72.5°	134.1	130.0	122.4	122.9	124.4
75°	117.3	113.2	104.6	105.1	106.6
77.5°	101.6	96.5	88.9	87.9	88.9
80°	84.8	80.2	73.6	70.6	73.6
82.5°	67.5	65.0	57.4	54.3	55.4
85°	47.2	45.7	39.1	37.1	38.6
87.5°	21.8	23.4	19.8	18.3	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)