

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: P291739

Luminaire Tested: **22GR-LD5-24-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291739
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-L83050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2440.0 lumens
Efficiency: N/A
Efficacy: 134.5 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

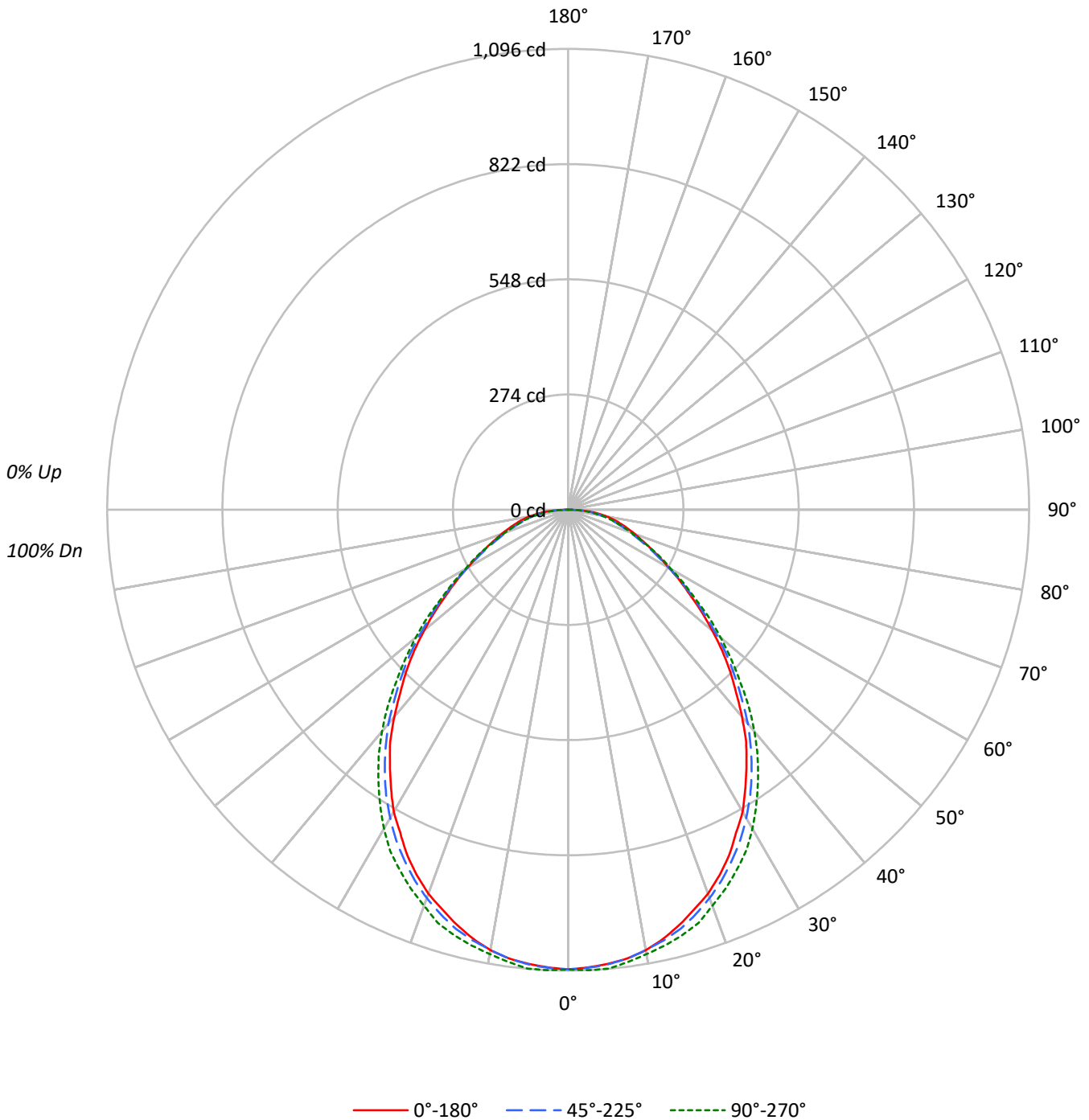
Input Watts (W): 18.135
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2942	2942	2942
5°	2929	2932	2960
10°	2907	2905	2933
15°	2848	2876	2918
20°	2783	2815	2870
25°	2691	2734	2811
30°	2577	2630	2722
35°	2427	2497	2585
40°	2258	2335	2420
45°	2073	2133	2199
50°	1870	1917	1978
55°	1659	1698	1727
60°	1487	1490	1520
65°	1370	1324	1370
70°	1323	1226	1261
75°	1346	1201	1224
80°	1450	1260	1260
85°	1609	1334	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	4.2
10°-20°	290.9	11.9
20°-30°	424.6	17.4
30°-40°	475.4	19.5
40°-50°	432.6	17.7
50°-60°	325.6	13.3
60°-70°	212.5	8.7
70°-80°	127.5	5.2
80°-90°	47.8	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°	818.7	33.6
0°-40°	1294.0	53.0
0°-60°	2052.3	84.1
0°-90°	2440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1084	1083	1086	1090	1096	103
15°	1022	1023	1032	1041	1048	288
25°	906	909	921	938	947	416
35°	739	745	760	778	787	462
45°	545	550	560	572	578	419
55°	354	359	362	367	368	320
65°	215	213	208	211	215	215
75°	130	125	116	116	118	137
85°	52	50	43	41	43	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.4	1093.4	1093.4	1093.4	1093.4
2.5°	1089.5	1088.9	1090.6	1093.4	1096.2
5°	1084.4	1082.8	1085.6	1089.5	1095.7
7.5°	1076.6	1076.6	1076.6	1083.9	1085.0
10°	1063.7	1064.8	1063.2	1070.4	1073.2
12.5°	1045.2	1045.8	1049.1	1056.4	1061.5
15°	1022.2	1023.4	1032.3	1040.7	1047.5
17.5°	996.5	1000.4	1008.8	1022.2	1030.6
20°	971.8	976.3	983.0	997.6	1002.1
22.5°	940.4	945.5	953.9	966.8	976.3
25°	906.2	909.0	920.8	937.6	946.6
27.5°	865.3	871.5	886.1	903.4	915.8
30°	829.4	832.8	846.3	866.4	876.0
32.5°	784.1	794.1	805.4	823.3	832.3
35°	738.7	745.4	760.0	777.9	786.9
37.5°	694.9	698.9	713.4	728.6	739.8
40°	642.8	650.1	664.7	680.9	688.8
42.5°	590.7	601.4	610.9	627.1	635.5
45°	544.7	550.4	560.4	572.2	577.8
47.5°	496.5	499.4	511.1	518.4	524.6
50°	446.7	450.0	457.9	465.2	472.5
52.5°	400.7	403.5	408.6	415.3	422.6
55°	353.6	358.7	362.0	367.1	368.2
57.5°	315.5	315.0	317.2	321.1	325.1
60°	276.3	277.4	276.9	280.8	282.5
62.5°	243.8	243.2	239.9	245.5	250.0
65°	215.2	213.0	207.9	211.3	215.2
67.5°	188.9	187.7	179.3	182.1	185.5
70°	168.1	164.2	155.8	157.5	160.3
72.5°	148.0	143.5	135.1	135.6	137.3
75°	129.5	125.0	115.5	116.0	117.7
77.5°	112.1	106.5	98.1	97.0	98.1
80°	93.6	88.5	81.3	77.9	81.3
82.5°	74.5	71.7	63.3	60.0	61.1
85°	52.1	50.4	43.2	40.9	42.6
87.5°	24.1	25.8	21.9	20.2	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)