

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: P291734

Luminaire Tested: **22GR-LD5-20-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291734
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-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: 2079.0 lumens
Efficiency: N/A
Efficacy: 134.7 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

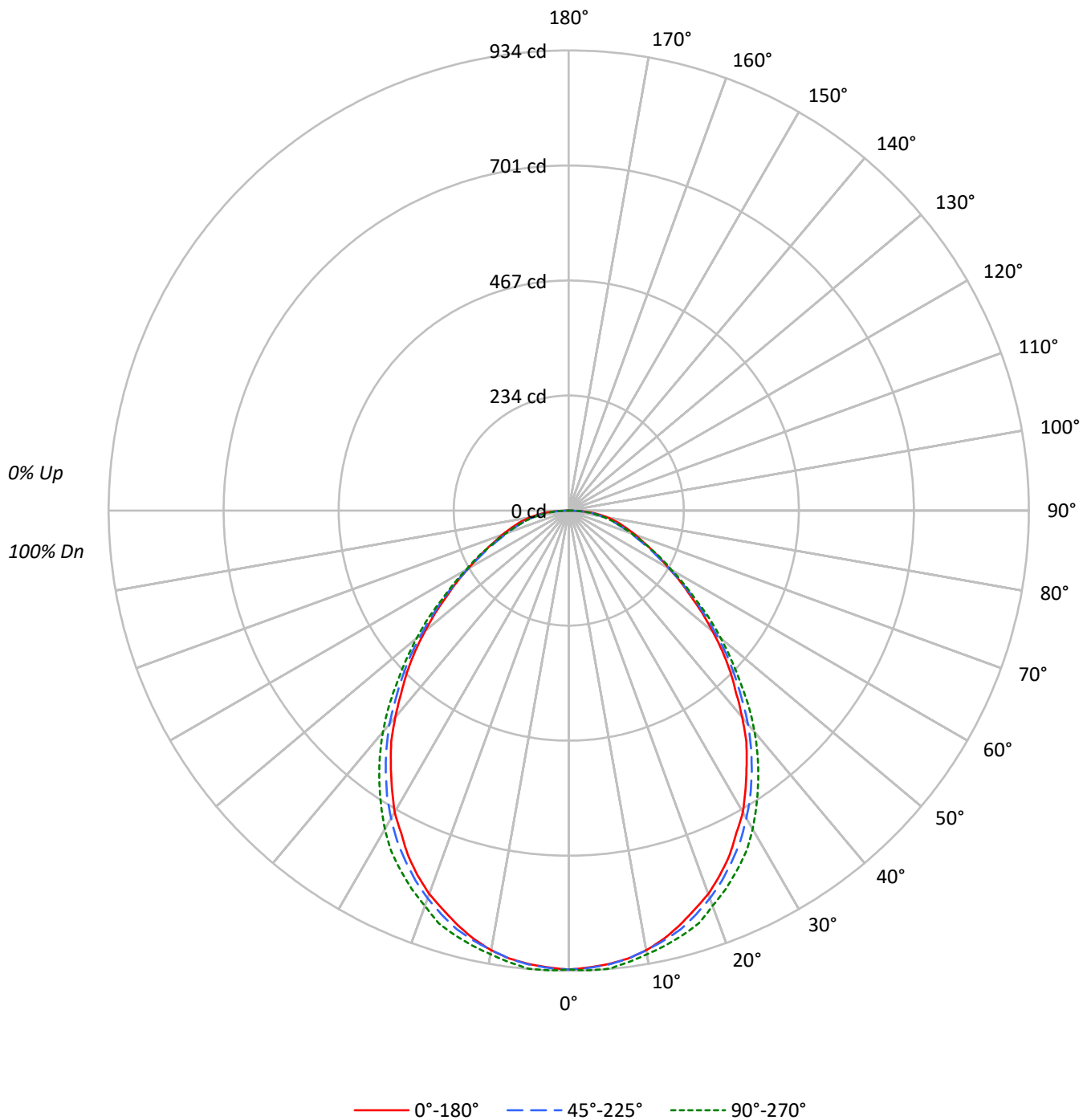
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2507	2507	2507
5°	2496	2499	2522
10°	2476	2475	2499
15°	2427	2450	2486
20°	2371	2399	2445
25°	2293	2330	2395
30°	2196	2241	2319
35°	2068	2127	2202
40°	1924	1989	2062
45°	1767	1817	1874
50°	1593	1633	1685
55°	1414	1447	1472
60°	1267	1270	1295
65°	1168	1128	1168
70°	1127	1045	1075
75°	1147	1023	1043
80°	1235	1072	1072
85°	1371	1136	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	4.2
10°-20°	247.9	11.9
20°-30°	361.8	17.4
30°-40°	405.0	19.5
40°-50°	368.6	17.7
50°-60°	277.4	13.3
60°-70°	181.1	8.7
70°-80°	108.6	5.2
80°-90°	40.7	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°	697.5	33.6
0°-40°	1102.6	53.0
0°-60°	1748.6	84.1
0°-90°	2079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	924	923	925	928	934	88
15°	871	872	880	887	892	245
25°	772	774	785	799	806	355
35°	629	635	648	663	670	393
45°	464	469	478	488	492	357
55°	301	306	308	313	314	272
65°	183	182	177	180	183	183
75°	110	106	98	99	100	117
85°	44	43	37	35	36	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	931.6	931.6	931.6	931.6	931.6
2.5°	928.3	927.8	929.3	931.6	934.0
5°	924.0	922.6	925.0	928.3	933.6
7.5°	917.3	917.3	917.3	923.5	924.5
10°	906.3	907.3	905.9	912.1	914.5
12.5°	890.6	891.1	893.9	900.1	904.4
15°	871.0	872.0	879.6	886.8	892.5
17.5°	849.0	852.4	859.5	871.0	878.2
20°	828.0	831.8	837.6	850.0	853.8
22.5°	801.3	805.6	812.7	823.7	831.8
25°	772.2	774.5	784.6	798.9	806.5
27.5°	737.3	742.5	755.0	769.8	780.3
30°	706.7	709.6	721.1	738.2	746.4
32.5°	668.1	676.6	686.2	701.5	709.1
35°	629.4	635.1	647.5	662.8	670.4
37.5°	592.1	595.5	607.9	620.8	630.3
40°	547.7	553.9	566.3	580.2	586.9
42.5°	503.3	512.4	520.5	534.3	541.5
45°	464.2	468.9	477.5	487.5	492.3
47.5°	423.1	425.5	435.5	441.7	447.0
50°	380.6	383.4	390.1	396.3	402.6
52.5°	341.4	343.8	348.1	353.8	360.1
55°	301.3	305.6	308.5	312.8	313.7
57.5°	268.8	268.4	270.3	273.6	277.0
60°	235.4	236.4	235.9	239.2	240.7
62.5°	207.7	207.2	204.4	209.2	213.0
65°	183.4	181.5	177.2	180.0	183.4
67.5°	160.9	160.0	152.8	155.2	158.1
70°	143.3	139.9	132.8	134.2	136.6
72.5°	126.1	122.2	115.1	115.6	117.0
75°	110.3	106.5	98.4	98.8	100.3
77.5°	95.5	90.7	83.6	82.6	83.6
80°	79.7	75.4	69.2	66.4	69.2
82.5°	63.5	61.1	54.0	51.1	52.0
85°	44.4	43.0	36.8	34.9	36.3
87.5°	20.5	22.0	18.6	17.2	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)