

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: P291848

Luminaire Tested: **22GR-LD5-32-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291848
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-LD5-32-F1-UNV-L93050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2959.0 lumens
Efficiency: N/A
Efficacy: 117.4 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

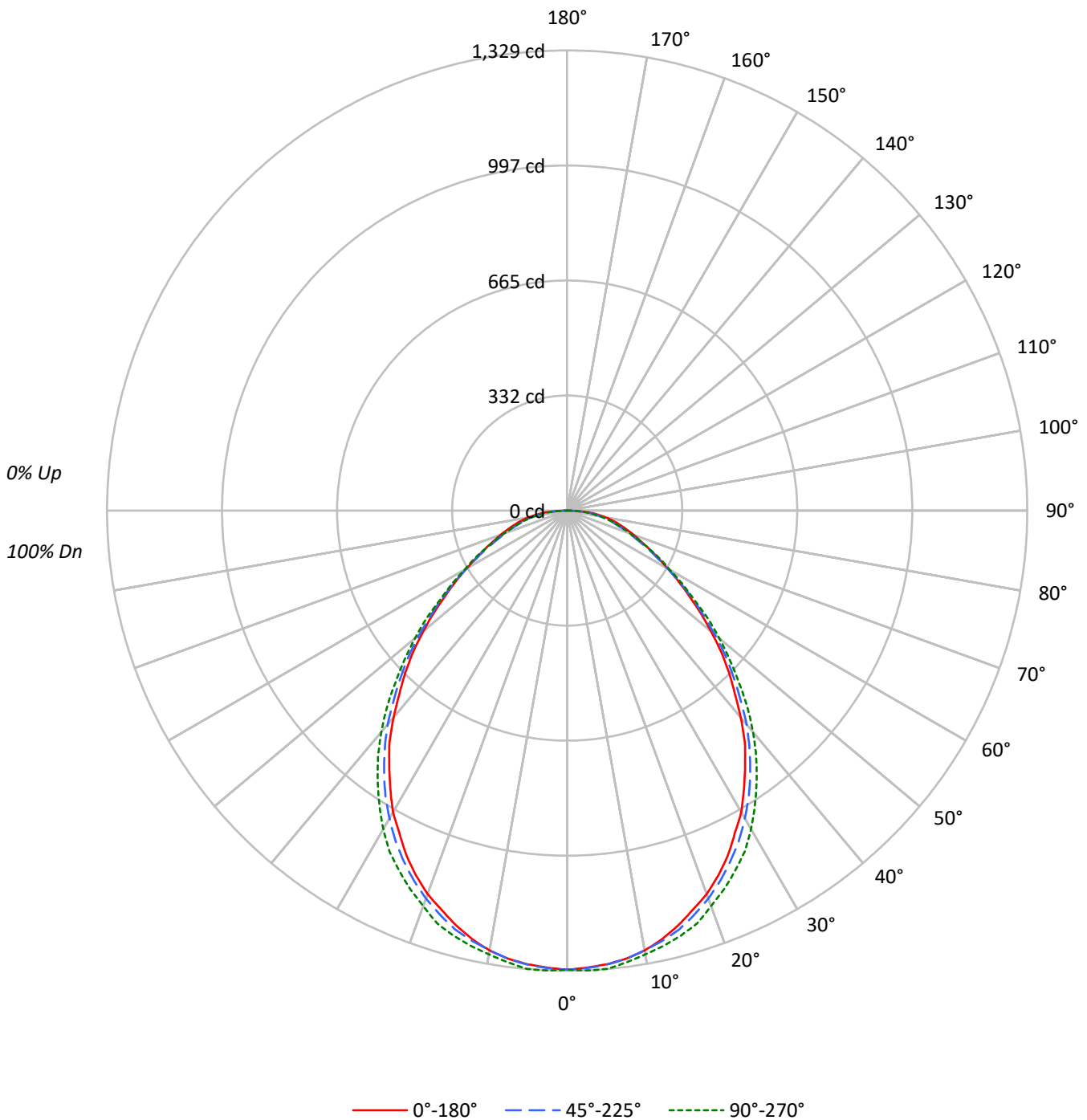
Input Watts (W): 25.203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3568	3568	3568
5°	3552	3556	3589
10°	3525	3523	3556
15°	3454	3488	3539
20°	3375	3414	3480
25°	3263	3316	3408
30°	3126	3189	3301
35°	2943	3028	3135
40°	2739	2832	2934
45°	2514	2586	2667
50°	2268	2325	2398
55°	2012	2060	2095
60°	1803	1807	1843
65°	1662	1605	1662
70°	1604	1486	1530
75°	1632	1456	1484
80°	1759	1526	1526
85°	1951	1615	1596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	4.2
10°-20°	352.8	11.9
20°-30°	514.9	17.4
30°-40°	576.5	19.5
40°-50°	524.7	17.7
50°-60°	394.9	13.3
60°-70°	257.7	8.7
70°-80°	154.5	5.2
80°-90°	58.0	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°	992.8	33.6
0°-40°	1569.3	53.0
0°-60°	2488.8	84.1
0°-90°	2959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1315	1313	1316	1321	1329	125
15°	1240	1241	1252	1262	1270	349
25°	1099	1102	1117	1137	1148	505
35°	896	904	922	943	954	560
45°	661	667	680	694	701	509
55°	429	435	439	445	446	388
65°	261	258	252	256	261	261
75°	157	152	140	141	143	167
85°	63	61	52	50	52	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1326.0	1326.0	1326.0	1326.0	1326.0
2.5°	1321.2	1320.6	1322.6	1326.0	1329.4
5°	1315.1	1313.1	1316.5	1321.2	1328.7
7.5°	1305.6	1305.6	1305.6	1314.4	1315.8
10°	1290.0	1291.3	1289.3	1298.1	1301.5
12.5°	1267.5	1268.2	1272.3	1281.1	1287.3
15°	1239.7	1241.0	1251.9	1262.1	1270.3
17.5°	1208.4	1213.2	1223.4	1239.7	1249.9
20°	1178.5	1183.9	1192.1	1209.8	1215.2
22.5°	1140.4	1146.6	1156.8	1172.4	1183.9
25°	1099.0	1102.4	1116.7	1137.0	1147.9
27.5°	1049.4	1056.9	1074.5	1095.6	1110.5
30°	1005.9	1010.0	1026.3	1050.7	1062.3
32.5°	950.8	963.1	976.7	998.4	1009.3
35°	895.8	903.9	921.6	943.4	954.2
37.5°	842.8	847.5	865.2	883.5	897.1
40°	779.6	788.4	806.1	825.8	835.3
42.5°	716.3	729.3	740.8	760.5	770.7
45°	660.6	667.4	679.6	693.9	700.7
47.5°	602.2	605.6	619.8	628.7	636.1
50°	541.7	545.8	555.3	564.1	572.9
52.5°	485.9	489.3	495.5	503.6	512.5
55°	428.9	435.0	439.1	445.2	446.5
57.5°	382.6	382.0	384.7	389.4	394.2
60°	335.1	336.4	335.7	340.5	342.5
62.5°	295.6	295.0	290.9	297.7	303.1
65°	261.0	258.3	252.1	256.2	261.0
67.5°	229.0	227.7	217.5	220.9	225.0
70°	203.9	199.1	188.9	191.0	194.4
72.5°	179.4	174.0	163.8	164.5	166.5
75°	157.0	151.6	140.0	140.7	142.7
77.5°	135.9	129.1	118.9	117.6	118.9
80°	113.5	107.4	98.5	94.5	98.5
82.5°	90.4	87.0	76.8	72.7	74.1
85°	63.2	61.2	52.3	49.6	51.7
87.5°	29.2	31.3	26.5	24.5	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)