

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: P291751

Luminaire Tested: **22GR-LD5-32-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291751
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-L83050-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: 3416.0 lumens
Efficiency: N/A
Efficacy: 132.6 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

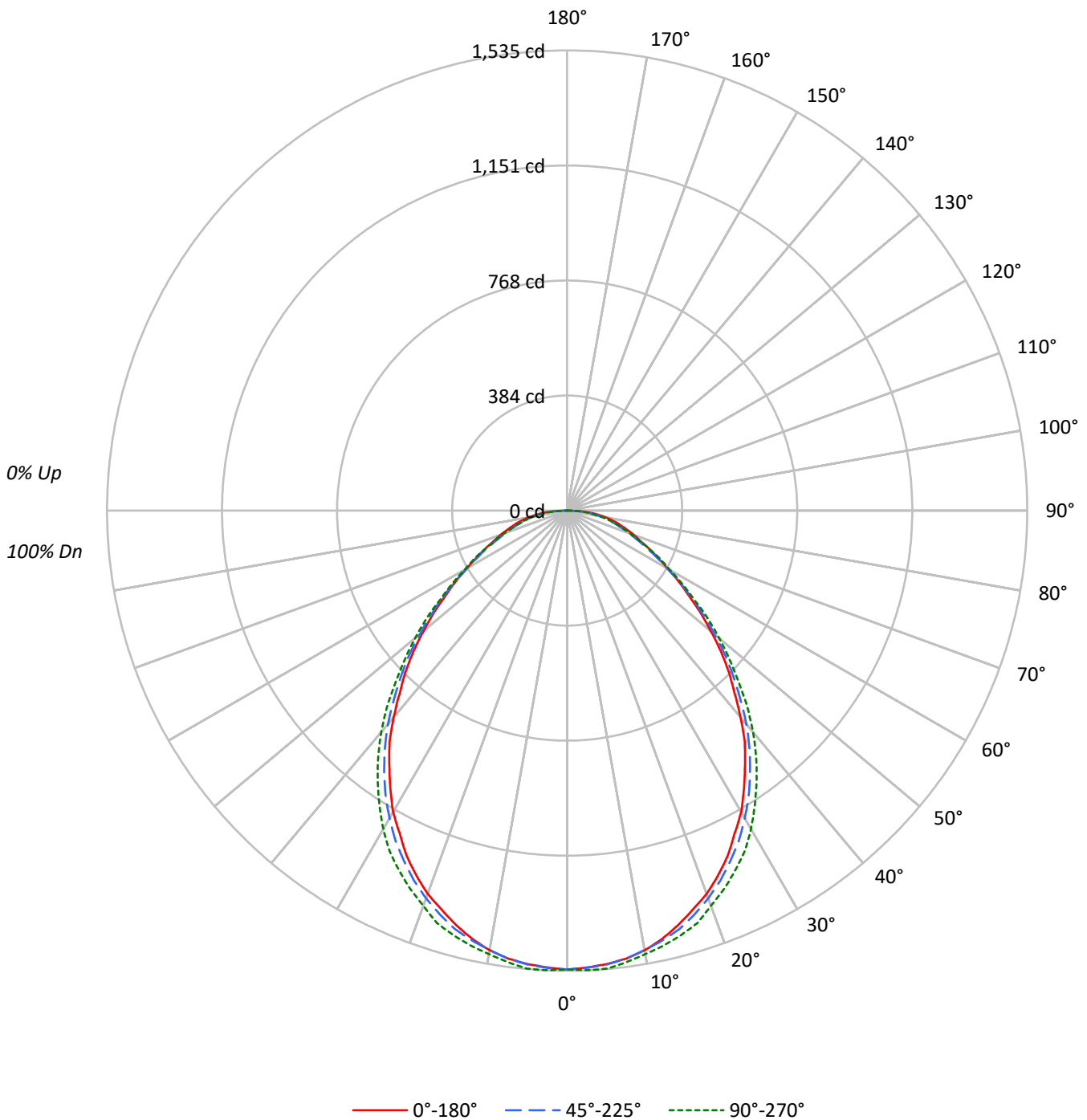
Input Watts (W): 25.761
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4119	4119	4119
5°	4101	4105	4143
10°	4069	4067	4106
15°	3987	4026	4085
20°	3896	3941	4017
25°	3767	3828	3935
30°	3608	3681	3811
35°	3397	3495	3619
40°	3162	3269	3387
45°	2902	2986	3078
50°	2618	2683	2769
55°	2323	2378	2419
60°	2082	2086	2128
65°	1918	1854	1918
70°	1852	1716	1766
75°	1884	1680	1713
80°	2030	1764	1764
85°	2254	1865	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	4.2
10°-20°	407.3	11.9
20°-30°	594.4	17.4
30°-40°	665.5	19.5
40°-50°	605.7	17.7
50°-60°	455.9	13.3
60°-70°	297.5	8.7
70°-80°	178.4	5.2
80°-90°	66.9	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°	1146.1	33.6
0°-40°	1811.6	53.0
0°-60°	2873.2	84.1
0°-90°	3416.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3416.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1518	1516	1520	1525	1534	144
15°	1431	1433	1445	1457	1466	403
25°	1269	1273	1289	1313	1325	582
35°	1034	1044	1064	1089	1102	646
45°	763	770	785	801	809	587
55°	495	502	507	514	516	447
65°	301	298	291	296	301	301
75°	181	175	162	162	165	192
85°	73	71	60	57	60	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.8	1530.8	1530.8	1530.8	1530.8
2.5°	1525.3	1524.5	1526.9	1530.8	1534.7
5°	1518.2	1515.9	1519.8	1525.3	1533.9
7.5°	1507.2	1507.2	1507.2	1517.4	1519.0
10°	1489.2	1490.8	1488.4	1498.6	1502.5
12.5°	1463.3	1464.1	1468.8	1479.0	1486.1
15°	1431.1	1432.7	1445.3	1457.0	1466.4
17.5°	1395.0	1400.5	1412.3	1431.1	1442.9
20°	1360.5	1366.8	1376.2	1396.6	1402.9
22.5°	1316.6	1323.6	1335.4	1353.5	1366.8
25°	1268.7	1272.6	1289.1	1312.7	1325.2
27.5°	1211.4	1220.1	1240.5	1264.8	1282.1
30°	1161.2	1165.9	1184.8	1213.0	1226.4
32.5°	1097.7	1111.8	1127.5	1152.6	1165.2
35°	1034.1	1043.5	1063.9	1089.0	1101.6
37.5°	972.9	978.4	998.8	1020.0	1035.7
40°	900.0	910.2	930.6	953.3	964.3
42.5°	827.0	841.9	855.2	878.0	889.8
45°	762.6	770.5	784.6	801.1	808.9
47.5°	695.2	699.1	715.6	725.8	734.4
50°	625.3	630.0	641.0	651.2	661.4
52.5°	561.0	564.9	572.0	581.4	591.6
55°	495.1	502.2	506.9	513.9	515.5
57.5°	441.7	441.0	444.1	449.6	455.1
60°	386.8	388.4	387.6	393.1	395.4
62.5°	341.3	340.5	335.8	343.7	349.9
65°	301.3	298.2	291.1	295.8	301.3
67.5°	264.4	262.8	251.1	255.0	259.7
70°	235.4	229.9	218.1	220.5	224.4
72.5°	207.1	200.9	189.1	189.9	192.2
75°	181.2	175.0	161.6	162.4	164.8
77.5°	156.9	149.1	137.3	135.7	137.3
80°	131.0	124.0	113.8	109.1	113.8
82.5°	104.4	100.4	88.7	84.0	85.5
85°	73.0	70.6	60.4	57.3	59.6
87.5°	33.7	36.1	30.6	28.2	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)