

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: P291927

Luminaire Tested: **22GR-LD5-43-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291927
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-LD5-43-F1-UNV-L92765-W2A1-U-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4105.0 lumens
Efficiency: N/A
Efficacy: 113.2 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

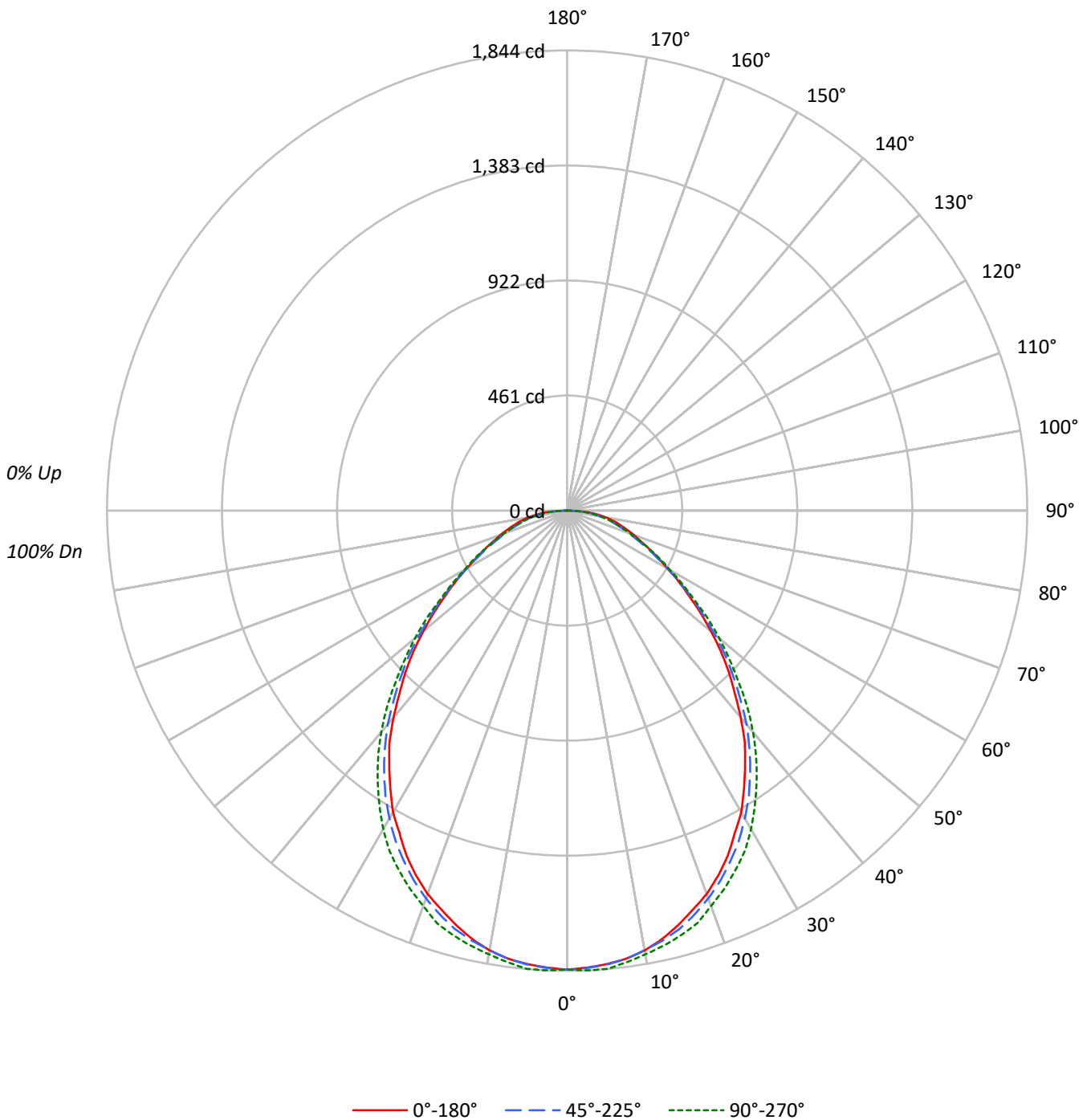
Input Watts (W): 36.27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4950	4950	4950
5°	4928	4933	4979
10°	4890	4887	4934
15°	4791	4839	4909
20°	4682	4736	4828
25°	4527	4600	4728
30°	4336	4424	4579
35°	4082	4200	4349
40°	3799	3928	4071
45°	3488	3588	3699
50°	3146	3225	3327
55°	2791	2858	2906
60°	2502	2507	2558
65°	2306	2227	2306
70°	2226	2062	2122
75°	2264	2019	2059
80°	2441	2118	2118
85°	2708	2242	2214



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	4.2
10°-20°	489.4	11.9
20°-30°	714.3	17.4
30°-40°	799.7	19.5
40°-50°	727.9	17.7
50°-60°	547.8	13.3
60°-70°	357.5	8.7
70°-80°	214.4	5.2
80°-90°	80.4	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°	1377.3	33.6
0°-40°	2177.0	53.0
0°-60°	3452.7	84.1
0°-90°	4105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1824	1822	1826	1833	1843	173
15°	1720	1722	1737	1751	1762	484
25°	1525	1529	1549	1577	1592	700
35°	1243	1254	1278	1309	1324	777
45°	916	926	943	963	972	706
55°	595	603	609	618	620	538
65°	362	358	350	356	362	362
75°	218	210	194	195	198	231
85°	88	85	73	69	72	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1839.5	1839.5	1839.5	1839.5	1839.5
2.5°	1832.9	1832.0	1834.8	1839.5	1844.3
5°	1824.5	1821.6	1826.3	1832.9	1843.3
7.5°	1811.3	1811.3	1811.3	1823.5	1825.4
10°	1789.6	1791.5	1788.6	1800.9	1805.6
12.5°	1758.5	1759.4	1765.1	1777.3	1785.8
15°	1719.8	1721.7	1736.8	1750.9	1762.2
17.5°	1676.4	1683.0	1697.2	1719.8	1733.9
20°	1634.9	1642.5	1653.8	1678.3	1685.9
22.5°	1582.1	1590.6	1604.8	1626.5	1642.5
25°	1524.6	1529.3	1549.1	1577.4	1592.5
27.5°	1455.8	1466.2	1490.7	1519.9	1540.6
30°	1395.4	1401.1	1423.7	1457.7	1473.7
32.5°	1319.1	1336.0	1354.9	1385.1	1400.2
35°	1242.7	1254.0	1278.5	1308.7	1323.8
37.5°	1169.2	1175.8	1200.3	1225.7	1244.6
40°	1081.5	1093.7	1118.2	1145.6	1158.8
42.5°	993.8	1011.7	1027.7	1055.1	1069.2
45°	916.5	925.9	942.9	962.7	972.1
47.5°	835.4	840.1	859.9	872.2	882.5
50°	751.5	757.1	770.3	782.6	794.8
52.5°	674.2	678.9	687.4	698.7	710.9
55°	595.0	603.4	609.1	617.6	619.5
57.5°	530.8	529.9	533.7	540.3	546.9
60°	464.8	466.7	465.8	472.4	475.2
62.5°	410.1	409.2	403.5	413.0	420.5
65°	362.1	358.3	349.8	355.5	362.1
67.5°	317.7	315.9	301.7	306.4	312.1
70°	282.9	276.3	262.1	264.9	269.7
72.5°	248.9	241.4	227.2	228.2	231.0
75°	217.8	210.3	194.2	195.2	198.0
77.5°	188.6	179.1	165.0	163.1	165.0
80°	157.5	149.0	136.7	131.1	136.7
82.5°	125.4	120.7	106.5	100.9	102.8
85°	87.7	84.9	72.6	68.8	71.7
87.5°	40.5	43.4	36.8	33.9	34.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)