

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: P291798

Luminaire Tested: **22GR-LD5-32-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291798
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-L82765-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3217.0 lumens
Efficiency: N/A
Efficacy: 129.6 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

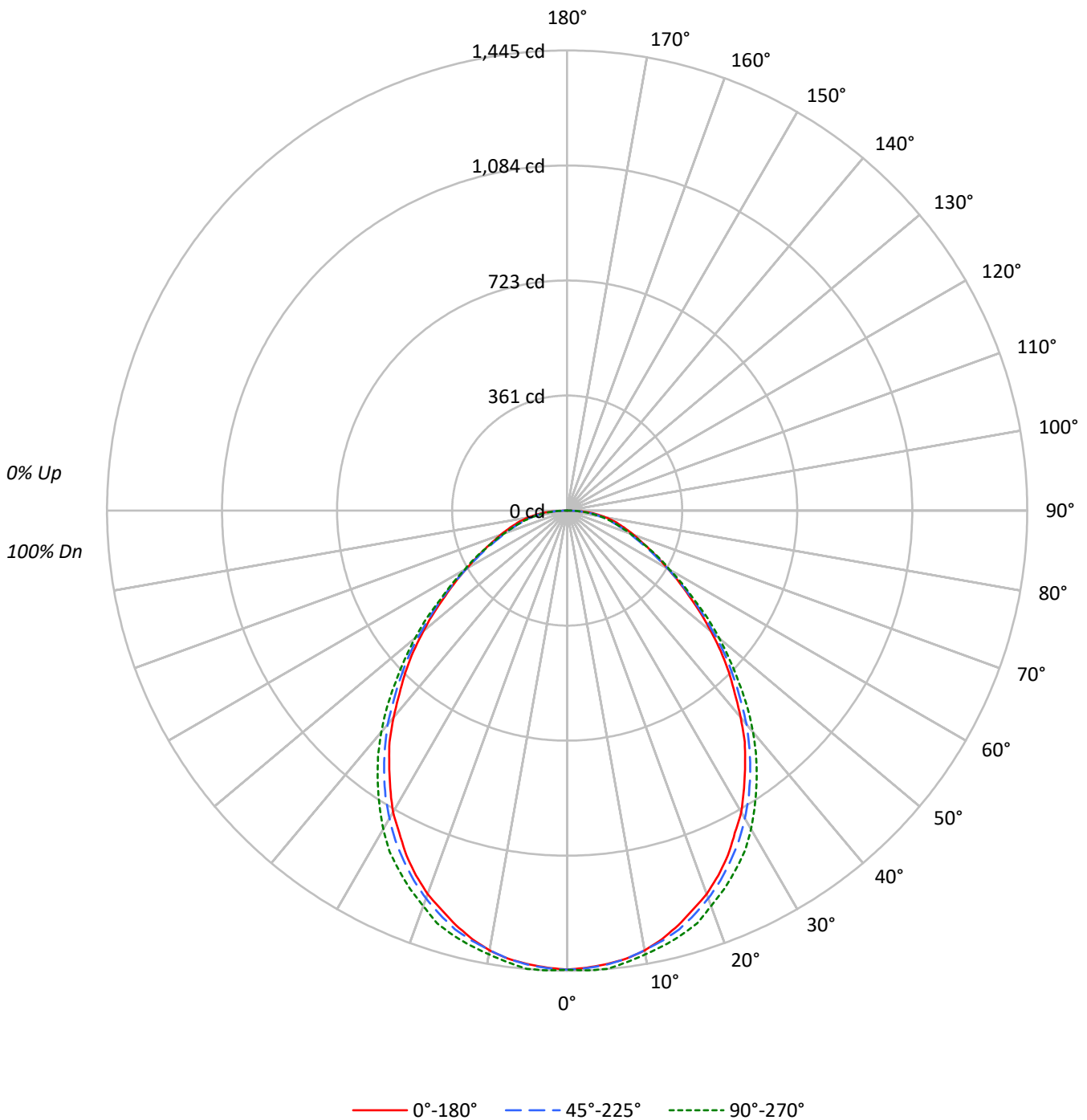
Input Watts (W): 24.831
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3879	3879	3879
5°	3862	3866	3902
10°	3832	3830	3866
15°	3755	3792	3847
20°	3669	3711	3783
25°	3548	3605	3706
30°	3398	3467	3589
35°	3199	3292	3408
40°	2977	3078	3190
45°	2733	2812	2899
50°	2465	2527	2608
55°	2188	2239	2278
60°	1961	1964	2004
65°	1806	1745	1806
70°	1744	1616	1662
75°	1775	1582	1614
80°	1912	1660	1660
85°	2121	1757	1735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	4.2
10°-20°	383.6	11.9
20°-30°	559.8	17.4
30°-40°	626.7	19.5
40°-50°	570.4	17.7
50°-60°	429.3	13.3
60°-70°	280.2	8.7
70°-80°	168.0	5.2
80°-90°	63.0	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°	1079.3	33.6
0°-40°	1706.1	53.0
0°-60°	2705.8	84.1
0°-90°	3217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1430	1428	1431	1436	1445	136
15°	1348	1349	1361	1372	1381	380
25°	1195	1198	1214	1236	1248	549
35°	974	983	1002	1026	1037	609
45°	718	726	739	754	762	553
55°	466	473	477	484	486	421
65°	284	281	274	279	284	284
75°	171	165	152	153	155	181
85°	69	66	57	54	56	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1441.6	1441.6	1441.6	1441.6	1441.6
2.5°	1436.4	1435.7	1437.9	1441.6	1445.3
5°	1429.8	1427.6	1431.3	1436.4	1444.6
7.5°	1419.4	1419.4	1419.4	1429.0	1430.5
10°	1402.4	1403.9	1401.7	1411.3	1415.0
12.5°	1378.1	1378.8	1383.2	1392.8	1399.5
15°	1347.8	1349.2	1361.1	1372.1	1381.0
17.5°	1313.8	1318.9	1330.0	1347.8	1358.8
20°	1281.3	1287.2	1296.0	1315.3	1321.2
22.5°	1239.9	1246.5	1257.6	1274.6	1287.2
25°	1194.8	1198.5	1214.0	1236.2	1248.0
27.5°	1140.9	1149.0	1168.2	1191.1	1207.4
30°	1093.6	1098.0	1115.7	1142.3	1154.9
32.5°	1033.7	1047.0	1061.8	1085.5	1097.3
35°	973.9	982.7	1002.0	1025.6	1037.4
37.5°	916.2	921.4	940.6	960.6	975.4
40°	847.5	857.1	876.3	897.8	908.1
42.5°	778.8	792.8	805.4	826.8	837.9
45°	718.2	725.6	738.9	754.4	761.8
47.5°	654.7	658.4	673.9	683.5	691.6
50°	588.9	593.3	603.7	613.3	622.9
52.5°	528.3	532.0	538.7	547.5	557.1
55°	466.3	472.9	477.3	484.0	485.5
57.5°	416.0	415.3	418.2	423.4	428.6
60°	364.3	365.8	365.0	370.2	372.4
62.5°	321.4	320.7	316.3	323.6	329.6
65°	283.7	280.8	274.1	278.6	283.7
67.5°	249.0	247.5	236.5	240.1	244.6
70°	221.7	216.5	205.4	207.6	211.3
72.5°	195.1	189.2	178.1	178.8	181.0
75°	170.7	164.8	152.2	153.0	155.2
77.5°	147.8	140.4	129.3	127.8	129.3
80°	123.4	116.7	107.1	102.7	107.1
82.5°	98.3	94.6	83.5	79.1	80.5
85°	68.7	66.5	56.9	53.9	56.2
87.5°	31.8	34.0	28.8	26.6	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)