

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: P291764

Luminaire Tested: **22GR-LD5-43-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291764
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-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: 4354.0 lumens
Efficiency: N/A
Efficacy: 123.9 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

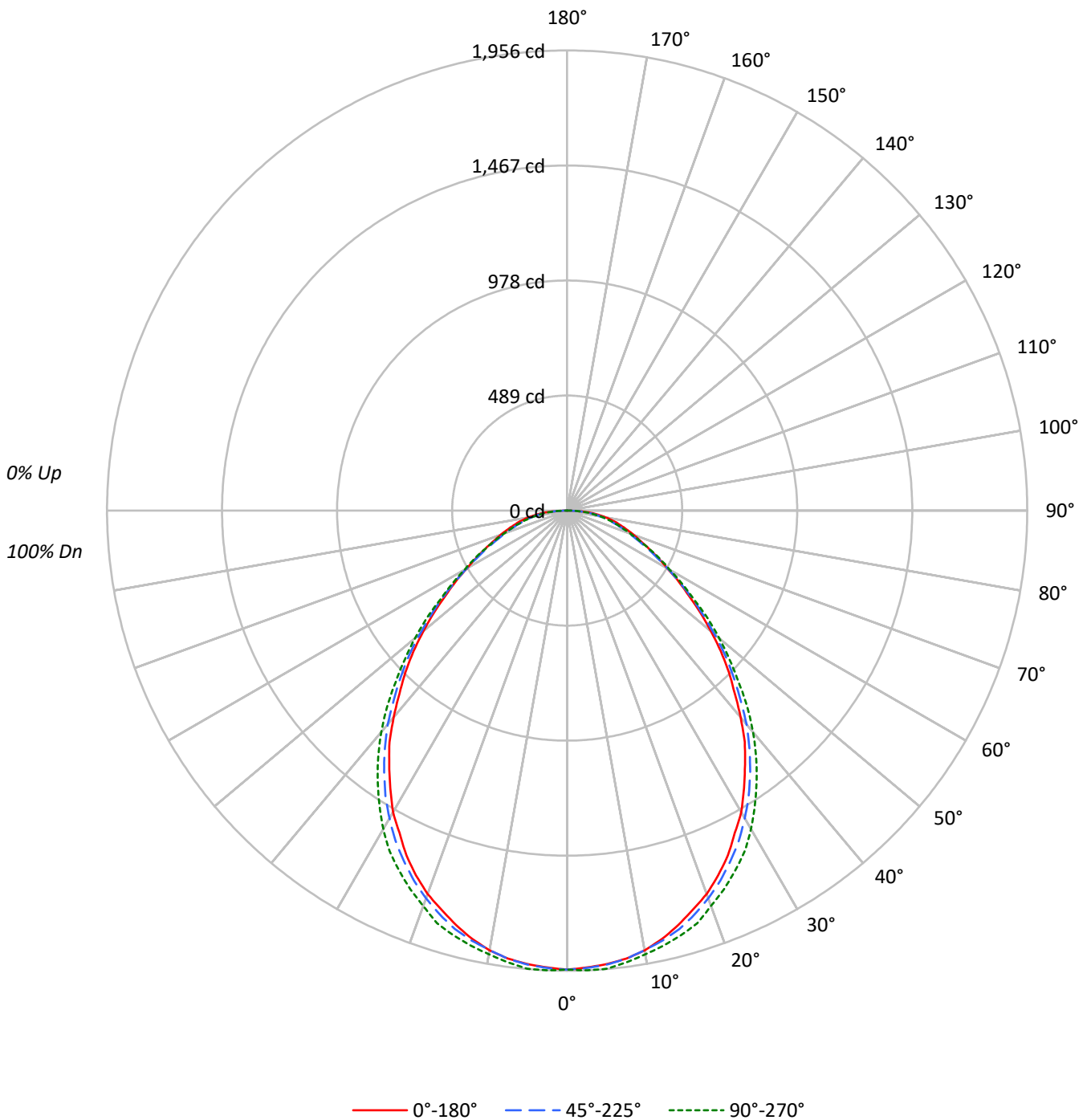
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5250	5250	5250
5°	5227	5233	5281
10°	5187	5184	5233
15°	5082	5132	5207
20°	4966	5023	5121
25°	4801	4879	5015
30°	4599	4692	4857
35°	4330	4455	4613
40°	4030	4167	4318
45°	3699	3806	3924
50°	3337	3421	3530
55°	2960	3031	3082
60°	2653	2659	2713
65°	2445	2362	2445
70°	2360	2187	2250
75°	2402	2142	2183
80°	2588	2247	2247
85°	2871	2377	2347



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.0	4.2
10°-20°	519.1	11.9
20°-30°	757.7	17.4
30°-40°	848.3	19.5
40°-50°	772.0	17.7
50°-60°	581.0	13.3
60°-70°	379.2	8.7
70°-80°	227.4	5.2
80°-90°	85.3	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°	1460.8	33.6
0°-40°	2309.1	53.0
0°-60°	3662.1	84.1
0°-90°	4354.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4354.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1935	1932	1937	1944	1955	184
15°	1824	1826	1842	1857	1869	514
25°	1617	1622	1643	1673	1689	742
35°	1318	1330	1356	1388	1404	824
45°	972	982	1000	1021	1031	748
55°	631	640	646	655	657	570
65°	384	380	371	377	384	384
75°	231	223	206	207	210	245
85°	93	90	77	73	76	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1951.1	1951.1	1951.1	1951.1	1951.1
2.5°	1944.1	1943.1	1946.1	1951.1	1956.1
5°	1935.1	1932.1	1937.1	1944.1	1955.1
7.5°	1921.1	1921.1	1921.1	1934.1	1936.1
10°	1898.1	1900.1	1897.1	1910.1	1915.1
12.5°	1865.1	1866.1	1872.1	1885.1	1894.1
15°	1824.1	1826.1	1842.1	1857.1	1869.1
17.5°	1778.1	1785.1	1800.1	1824.1	1839.1
20°	1734.1	1742.1	1754.1	1780.1	1788.1
22.5°	1678.1	1687.1	1702.1	1725.1	1742.1
25°	1617.1	1622.1	1643.1	1673.1	1689.1
27.5°	1544.1	1555.1	1581.1	1612.1	1634.1
30°	1480.1	1486.1	1510.1	1546.1	1563.1
32.5°	1399.1	1417.1	1437.1	1469.1	1485.1
35°	1318.1	1330.1	1356.1	1388.1	1404.1
37.5°	1240.1	1247.1	1273.1	1300.1	1320.1
40°	1147.1	1160.1	1186.1	1215.1	1229.1
42.5°	1054.1	1073.1	1090.1	1119.1	1134.1
45°	972.1	982.1	1000.1	1021.1	1031.1
47.5°	886.1	891.1	912.1	925.1	936.1
50°	797.0	803.0	817.1	830.1	843.1
52.5°	715.0	720.0	729.0	741.0	754.0
55°	631.0	640.0	646.0	655.0	657.0
57.5°	563.0	562.0	566.0	573.0	580.0
60°	493.0	495.0	494.0	501.0	504.0
62.5°	435.0	434.0	428.0	438.0	446.0
65°	384.0	380.0	371.0	377.0	384.0
67.5°	337.0	335.0	320.0	325.0	331.0
70°	300.0	293.0	278.0	281.0	286.0
72.5°	264.0	256.0	241.0	242.0	245.0
75°	231.0	223.0	206.0	207.0	210.0
77.5°	200.0	190.0	175.0	173.0	175.0
80°	167.0	158.0	145.0	139.0	145.0
82.5°	133.0	128.0	113.0	107.0	109.0
85°	93.0	90.0	77.0	73.0	76.0
87.5°	43.0	46.0	39.0	36.0	37.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)