

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: P292547

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4052.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

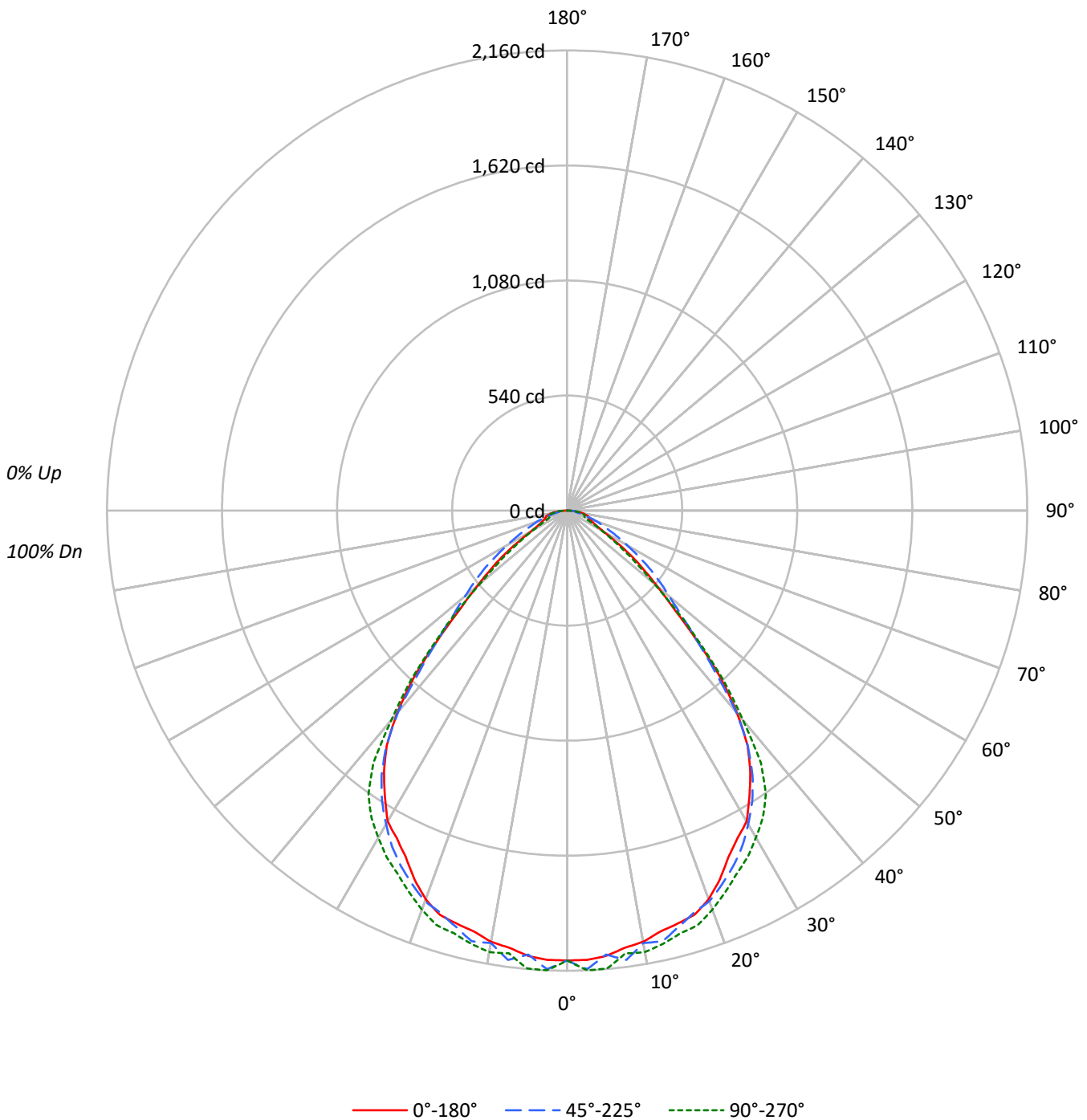
Input Watts (W): 35.061
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5683	5683	5683
5°	5668	5650	5828
10°	5617	5632	5750
15°	5591	5633	5724
20°	5561	5588	5708
25°	5323	5474	5587
30°	5236	5283	5509
35°	4924	4987	5341
40°	4363	4333	4504
45°	3259	3266	3357
50°	2294	2610	2222
55°	1693	2204	1518
60°	1059	1742	992
65°	863	1380	693
70°	856	1149	684
75°	1063	843	884
80°	1184	666	1080
85°	1179	1238	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.0	5.0
10°-20°	572.6	14.1
20°-30°	848.1	20.9
30°-40°	950.0	23.4
40°-50°	698.0	17.2
50°-60°	390.2	9.6
60°-70°	217.4	5.4
70°-80°	127.8	3.2
80°-90°	47.0	1.2
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°	1621.7	40.0
0°-40°	2571.7	63.5
0°-60°	3659.8	90.3
0°-90°	4052.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4052.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2112	2112	2112	2112	2112	
5°	2098	2138	2092	2135	2158	199
15°	2007	2019	2022	2053	2054	567
25°	1793	1807	1844	1869	1882	831
35°	1499	1500	1518	1587	1626	929
45°	856	926	858	919	882	669
55°	361	439	470	469	324	322
65°	136	241	217	278	109	140
75°	102	144	81	163	85	103
85°	38	56	40	52	39	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2111.8	2111.8	2111.8	2111.8	2111.8
2.5°	2110.8	2129.9	2154.8	2157.6	2159.5
5°	2098.4	2137.6	2091.7	2134.7	2157.6
7.5°	2069.8	2093.7	2127.1	2084.1	2096.5
10°	2055.5	2061.2	2061.2	2114.7	2104.2
12.5°	2023.0	2061.2	2070.7	2060.2	2083.1
15°	2006.8	2019.2	2022.0	2052.6	2054.5
17.5°	1988.6	1985.8	1979.1	2001.0	2040.2
20°	1941.9	1931.4	1951.4	1978.1	1993.4
22.5°	1873.1	1876.0	1899.8	1921.8	1939.0
25°	1792.9	1807.2	1843.5	1869.3	1881.7
27.5°	1732.8	1753.8	1778.6	1809.2	1834.0
30°	1685.0	1683.1	1700.3	1744.2	1772.9
32.5°	1592.4	1599.1	1617.3	1669.8	1709.9
35°	1498.9	1499.8	1518.0	1586.7	1625.8
37.5°	1391.0	1383.4	1393.9	1468.3	1494.1
40°	1242.1	1244.0	1233.5	1286.0	1282.2
42.5°	1068.3	1083.6	1029.2	1097.9	1093.1
45°	856.4	926.1	858.3	919.4	882.1
47.5°	675.9	779.0	722.7	767.6	697.9
50°	548.0	654.0	623.4	643.5	530.8
52.5°	449.7	535.6	545.1	549.9	414.3
55°	360.9	439.2	469.7	468.8	323.6
57.5°	266.4	357.1	392.4	406.7	245.4
60°	196.7	296.9	323.6	355.1	184.3
62.5°	158.5	260.6	267.3	311.2	140.3
65°	135.6	240.6	216.7	277.8	108.8
67.5°	120.3	224.4	176.6	248.2	92.6
70°	108.8	199.5	146.1	222.4	86.9
72.5°	106.0	169.9	112.7	198.6	85.9
75°	102.2	144.2	81.1	163.3	85.0
77.5°	87.8	123.2	58.2	126.0	79.2
80°	76.4	98.3	43.0	94.5	69.7
82.5°	59.2	74.5	38.2	71.6	56.3
85°	38.2	56.3	40.1	51.6	39.1
87.5°	18.1	31.5	28.6	27.7	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)