

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: P292607

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292607
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-L82765-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: 4048.0 lumens
Efficiency: N/A
Efficacy: 116.1 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

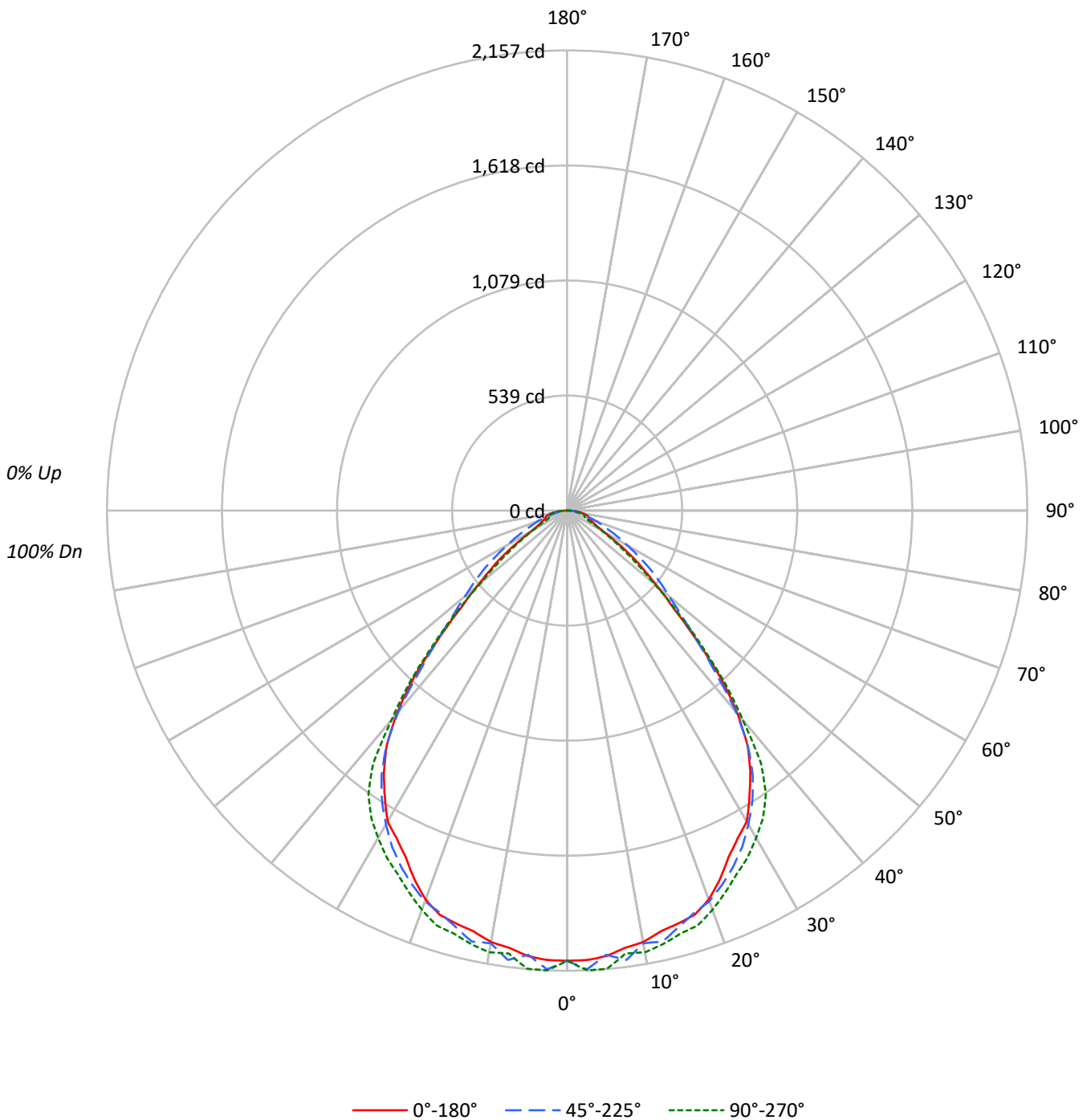
Input Watts (W): 34.875
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5677	5677	5677
5°	5663	5645	5823
10°	5611	5627	5744
15°	5585	5628	5718
20°	5555	5583	5703
25°	5318	5468	5582
30°	5231	5278	5503
35°	4919	4982	5336
40°	4359	4329	4500
45°	3256	3263	3354
50°	2292	2607	2220
55°	1691	2201	1517
60°	1058	1740	991
65°	862	1379	692
70°	855	1148	683
75°	1062	843	883
80°	1182	665	1079
85°	1179	1238	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.8	5.0
10°-20°	572.0	14.1
20°-30°	847.2	20.9
30°-40°	949.0	23.4
40°-50°	697.3	17.2
50°-60°	389.8	9.6
60°-70°	217.2	5.4
70°-80°	127.6	3.2
80°-90°	46.9	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°	1620.1	40.0
0°-40°	2569.1	63.5
0°-60°	3656.2	90.3
0°-90°	4048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2110	2110	2110	2110	2110	
5°	2096	2136	2090	2133	2156	198
15°	2005	2017	2020	2051	2052	566
25°	1791	1806	1842	1868	1880	830
35°	1497	1498	1516	1585	1624	928
45°	856	925	857	918	881	668
55°	360	439	469	468	323	322
65°	135	240	216	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°	2109.7	2109.7	2109.7	2109.7	2109.7
2.5°	2108.8	2127.8	2152.6	2155.5	2157.4
5°	2096.4	2135.5	2089.7	2132.6	2155.5
7.5°	2067.7	2091.6	2125.0	2082.0	2094.4
10°	2053.4	2059.2	2059.2	2112.6	2102.1
12.5°	2021.0	2059.2	2068.7	2058.2	2081.1
15°	2004.8	2017.2	2020.1	2050.6	2052.5
17.5°	1986.7	1983.8	1977.1	1999.1	2038.2
20°	1939.9	1929.4	1949.5	1976.2	1991.4
22.5°	1871.3	1874.1	1898.0	1919.9	1937.1
25°	1791.2	1805.5	1841.7	1867.5	1879.9
27.5°	1731.1	1752.0	1776.8	1807.4	1832.2
30°	1683.4	1681.5	1698.6	1742.5	1771.1
32.5°	1590.9	1597.5	1615.7	1668.1	1708.2
35°	1497.4	1498.3	1516.5	1585.1	1624.2
37.5°	1389.6	1382.0	1392.5	1466.9	1492.6
40°	1240.8	1242.7	1232.3	1284.7	1280.9
42.5°	1067.3	1082.5	1028.1	1096.8	1092.0
45°	855.5	925.1	857.4	918.5	881.3
47.5°	675.3	778.3	722.0	766.8	697.2
50°	547.5	653.3	622.8	642.8	530.3
52.5°	449.2	535.1	544.6	549.4	413.9
55°	360.5	438.7	469.2	468.3	323.3
57.5°	266.1	356.7	392.0	406.3	245.1
60°	196.5	296.6	323.3	354.8	184.1
62.5°	158.3	260.4	267.1	310.9	140.2
65°	135.4	240.3	216.5	277.5	108.7
67.5°	120.2	224.1	176.4	248.0	92.5
70°	108.7	199.3	145.9	222.2	86.8
72.5°	105.9	169.8	112.5	198.4	85.8
75°	102.1	144.0	81.1	163.1	84.9
77.5°	87.7	123.0	58.2	125.9	79.2
80°	76.3	98.2	42.9	94.4	69.6
82.5°	59.1	74.4	38.2	71.5	56.3
85°	38.2	56.3	40.1	51.5	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)