

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: P292709

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292709
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-L92765-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3963.0 lumens
Efficiency: N/A
Efficacy: 110.1 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

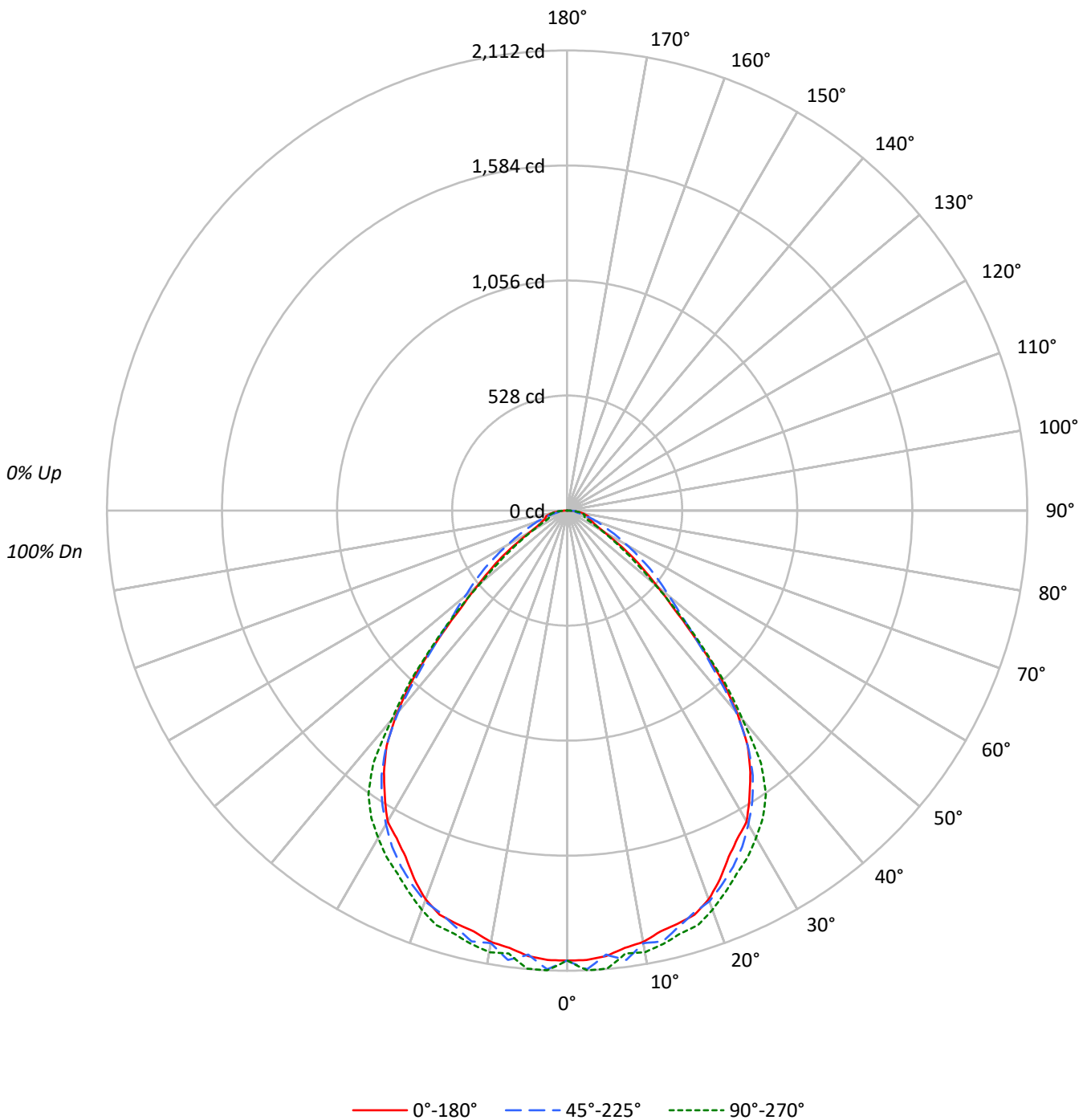
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5558	5558	5558
5°	5544	5526	5700
10°	5493	5508	5623
15°	5468	5509	5598
20°	5439	5465	5583
25°	5206	5353	5464
30°	5121	5167	5388
35°	4816	4877	5224
40°	4267	4238	4405
45°	3188	3194	3283
50°	2244	2552	2174
55°	1656	2155	1485
60°	1035	1703	970
65°	844	1350	677
70°	837	1124	669
75°	1039	826	864
80°	1158	651	1057
85°	1152	1210	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.6	5.0
10°-20°	560.0	14.1
20°-30°	829.4	20.9
30°-40°	929.1	23.4
40°-50°	682.7	17.2
50°-60°	381.6	9.6
60°-70°	212.7	5.4
70°-80°	125.0	3.2
80°-90°	45.9	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°	1586.1	40.0
0°-40°	2515.2	63.5
0°-60°	3579.4	90.3
0°-90°	3963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2065	2065	2065	2065	2065	
5°	2052	2091	2046	2088	2110	194
15°	1963	1975	1978	2008	2009	554
25°	1754	1768	1803	1828	1840	813
35°	1466	1467	1485	1552	1590	908
45°	838	906	839	899	863	654
55°	353	430	459	458	316	315
65°	133	235	212	272	106	137
75°	100	141	79	160	83	100
85°	37	55	39	50	38	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2065.4	2065.4	2065.4	2065.4	2065.4
2.5°	2064.5	2083.1	2107.4	2110.2	2112.1
5°	2052.3	2090.6	2045.8	2087.8	2110.2
7.5°	2024.3	2047.7	2080.3	2038.3	2050.5
10°	2010.3	2015.9	2015.9	2068.2	2057.9
12.5°	1978.6	2015.9	2025.3	2015.0	2037.4
15°	1962.7	1974.8	1977.6	2007.5	2009.4
17.5°	1945.0	1942.2	1935.6	1957.1	1995.4
20°	1899.2	1888.9	1908.5	1934.7	1949.6
22.5°	1832.0	1834.8	1858.1	1879.6	1896.4
25°	1753.5	1767.5	1803.0	1828.2	1840.4
27.5°	1694.7	1715.3	1739.5	1769.4	1793.7
30°	1648.0	1646.2	1663.0	1705.9	1733.9
32.5°	1557.5	1564.0	1581.7	1633.1	1672.3
35°	1466.0	1466.9	1484.6	1551.9	1590.1
37.5°	1360.4	1353.0	1363.2	1436.1	1461.3
40°	1214.8	1216.6	1206.4	1257.7	1254.0
42.5°	1044.8	1059.8	1006.6	1073.8	1069.1
45°	837.6	905.7	839.4	899.2	862.8
47.5°	661.1	761.9	706.8	750.7	682.6
50°	536.0	639.6	609.7	629.3	519.2
52.5°	439.8	523.8	533.2	537.8	405.2
55°	352.9	429.5	459.4	458.5	316.5
57.5°	260.5	349.2	383.8	397.8	240.0
60°	192.3	290.4	316.5	347.3	180.2
62.5°	155.0	254.9	261.4	304.4	137.3
65°	132.6	235.3	212.0	271.7	106.4
67.5°	117.6	219.4	172.7	242.8	90.6
70°	106.4	195.1	142.9	217.6	85.0
72.5°	103.6	166.2	110.2	194.2	84.0
75°	99.9	141.0	79.4	159.7	83.1
77.5°	85.9	120.5	57.0	123.3	77.5
80°	74.7	96.2	42.0	92.4	68.2
82.5°	57.9	72.8	37.3	70.0	55.1
85°	37.3	55.1	39.2	50.4	38.3
87.5°	17.7	30.8	28.0	27.1	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)