

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: P292599

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292599
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-LD5-40-A19/156-UNV-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3922.0 lumens
Efficiency: N/A
Efficacy: 120.5 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

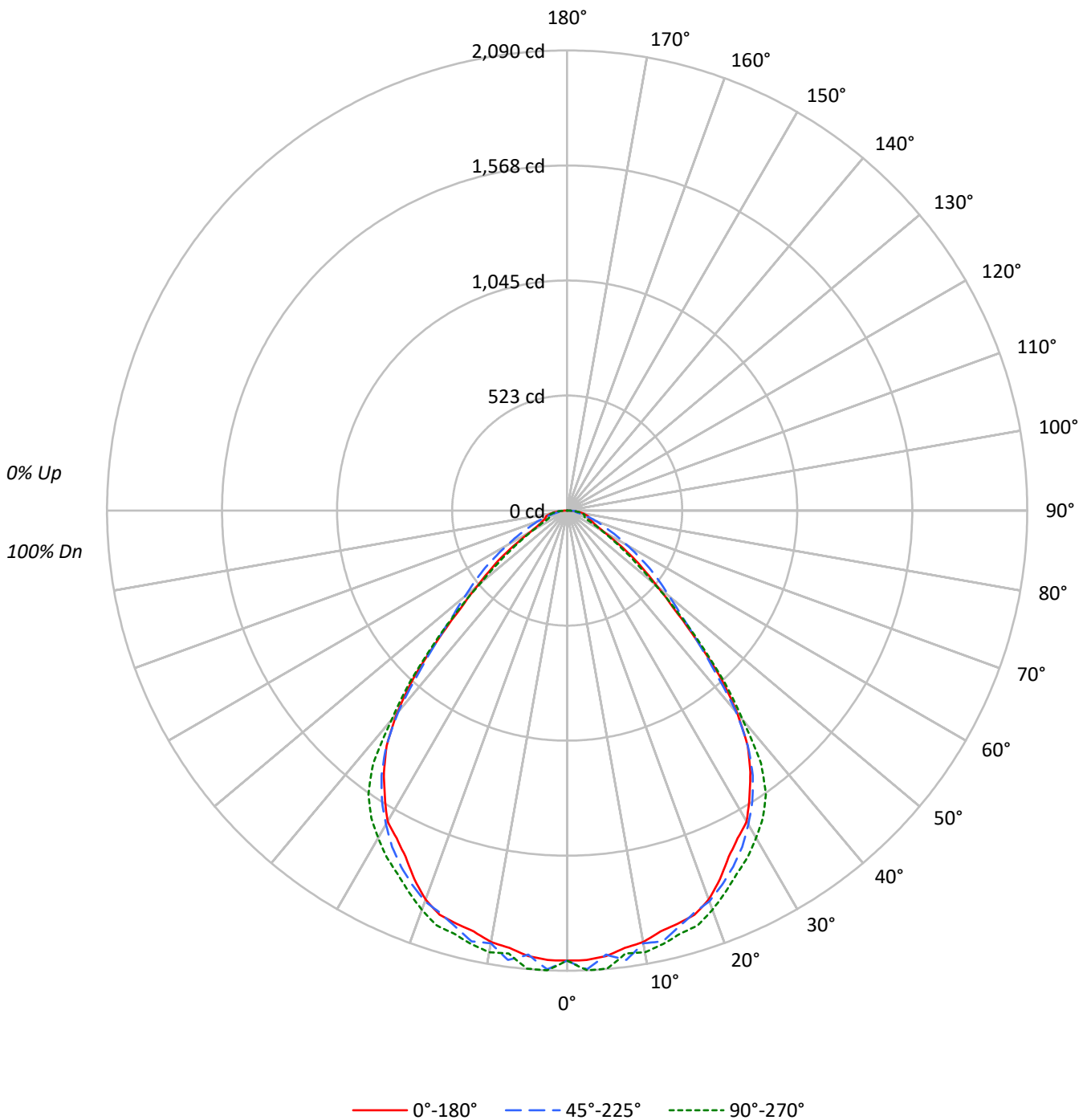
Input Watts (W): 32.55
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5500	5500	5500
5°	5487	5469	5641
10°	5436	5452	5565
15°	5411	5453	5540
20°	5383	5409	5525
25°	5153	5298	5408
30°	5068	5114	5332
35°	4766	4827	5170
40°	4223	4194	4359
45°	3154	3161	3249
50°	2220	2526	2151
55°	1639	2133	1470
60°	1025	1686	960
65°	835	1336	670
70°	828	1113	662
75°	1028	816	855
80°	1145	645	1046
85°	1142	1198	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.6	5.0
10°-20°	554.2	14.1
20°-30°	820.9	20.9
30°-40°	919.5	23.4
40°-50°	675.6	17.2
50°-60°	377.6	9.6
60°-70°	210.5	5.4
70°-80°	123.7	3.2
80°-90°	45.5	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°	1569.7	40.0
0°-40°	2489.2	63.5
0°-60°	3542.4	90.3
0°-90°	3922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3922.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2031	2069	2025	2066	2088	192
15°	1942	1954	1957	1987	1989	549
25°	1735	1749	1784	1809	1821	804
35°	1451	1452	1469	1536	1574	899
45°	829	896	831	890	854	648
55°	349	425	455	454	313	312
65°	131	233	210	269	105	136
75°	99	140	78	158	82	99
85°	37	54	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°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2043.1	2061.6	2085.6	2088.4	2090.2
5°	2031.1	2069.0	2024.6	2066.2	2088.4
7.5°	2003.4	2026.5	2058.8	2017.2	2029.3
10°	1989.5	1995.1	1995.1	2046.8	2036.6
12.5°	1958.1	1995.1	2004.3	1994.1	2016.3
15°	1942.4	1954.4	1957.2	1986.7	1988.6
17.5°	1924.8	1922.1	1915.6	1936.8	1974.7
20°	1879.6	1869.4	1888.8	1914.7	1929.5
22.5°	1813.0	1815.8	1838.9	1860.1	1876.8
25°	1735.4	1749.3	1784.4	1809.3	1821.3
27.5°	1677.2	1697.5	1721.5	1751.1	1775.1
30°	1631.0	1629.1	1645.8	1688.3	1716.0
32.5°	1541.3	1547.8	1565.4	1616.2	1655.0
35°	1450.8	1451.7	1469.3	1535.8	1573.7
37.5°	1346.4	1339.0	1349.1	1421.2	1446.2
40°	1202.2	1204.1	1193.9	1244.7	1241.0
42.5°	1034.0	1048.8	996.1	1062.7	1058.1
45°	828.9	896.3	830.7	889.9	853.8
47.5°	654.2	754.0	699.5	743.0	675.5
50°	530.4	633.0	603.4	622.8	513.8
52.5°	435.2	518.4	527.6	532.3	401.0
55°	349.3	425.1	454.6	453.7	313.3
57.5°	257.8	345.6	379.8	393.7	237.5
60°	190.4	287.4	313.3	343.8	178.3
62.5°	153.4	252.3	258.7	301.2	135.8
65°	131.2	232.9	209.8	268.9	105.3
67.5°	116.4	217.2	171.0	240.3	89.6
70°	105.3	193.1	141.4	215.3	84.1
72.5°	102.6	164.5	109.0	192.2	83.2
75°	98.9	139.5	78.5	158.0	82.2
77.5°	85.0	119.2	56.4	122.0	76.7
80°	73.9	95.2	41.6	91.5	67.5
82.5°	57.3	72.1	37.0	69.3	54.5
85°	37.0	54.5	38.8	49.9	37.9
87.5°	17.6	30.5	27.7	26.8	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)