

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: P292699

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292699
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-L92765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3638.0 lumens
Efficiency: N/A
Efficacy: 110.2 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

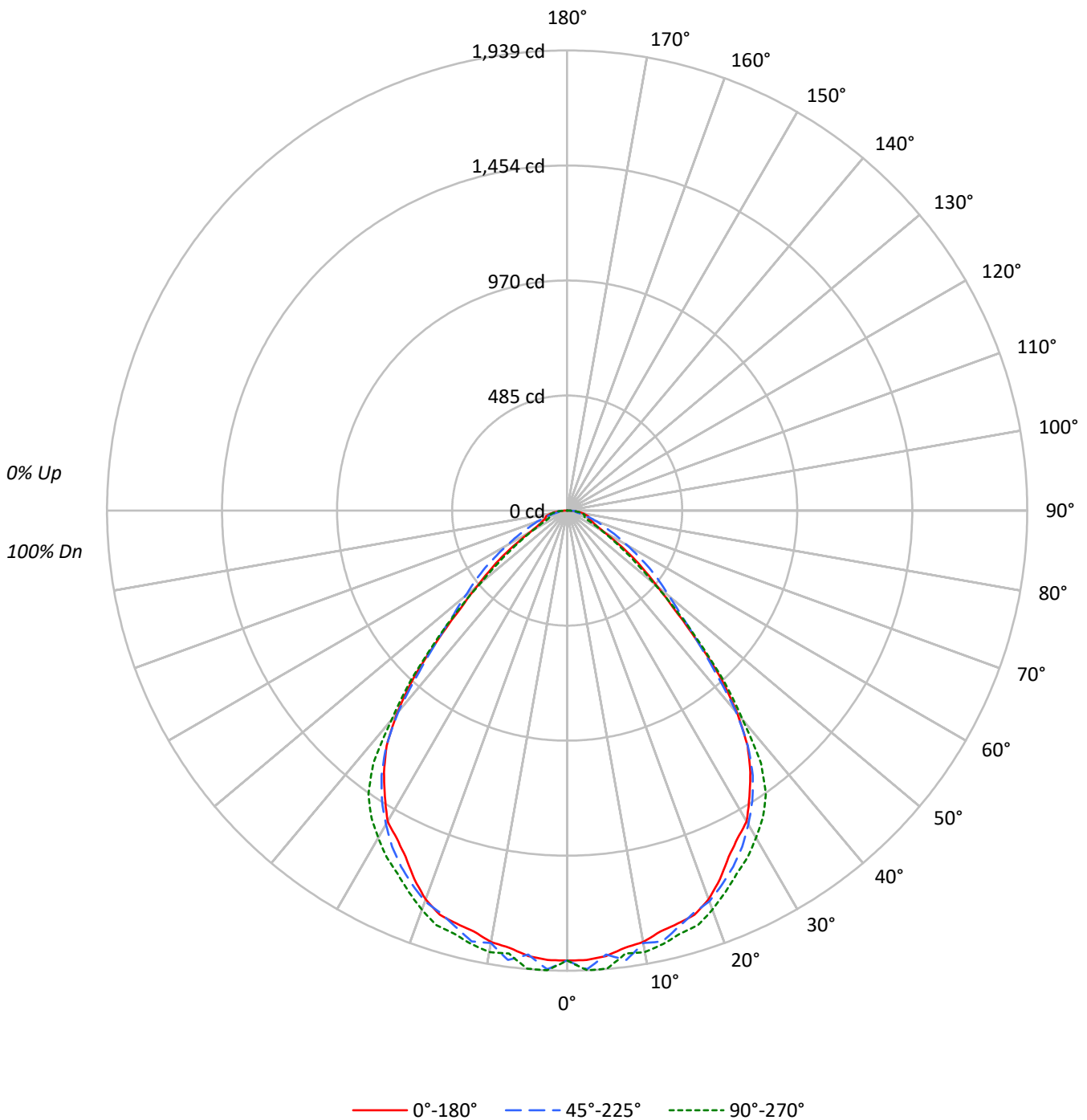
Input Watts (W): 33.015
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5102	5102	5102
5°	5089	5073	5233
10°	5043	5057	5162
15°	5019	5058	5139
20°	4993	5017	5125
25°	4779	4915	5016
30°	4701	4744	4946
35°	4421	4477	4795
40°	3918	3890	4044
45°	2926	2933	3014
50°	2060	2343	1995
55°	1520	1978	1363
60°	950	1564	890
65°	775	1239	622
70°	769	1031	614
75°	953	758	793
80°	1063	598	970
85°	1059	1112	1084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	5.0
10°-20°	514.1	14.1
20°-30°	761.4	20.9
30°-40°	852.9	23.4
40°-50°	626.7	17.2
50°-60°	350.3	9.6
60°-70°	195.2	5.4
70°-80°	114.7	3.2
80°-90°	42.2	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°	1456.0	40.0
0°-40°	2308.9	63.5
0°-60°	3285.9	90.3
0°-90°	3638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1896	1896	1896	1896	1896	
5°	1884	1919	1878	1917	1937	178
15°	1802	1813	1816	1843	1845	509
25°	1610	1623	1655	1678	1690	746
35°	1346	1347	1363	1425	1460	834
45°	769	831	771	825	792	601
55°	324	394	422	421	291	289
65°	122	216	195	249	98	126
75°	92	129	73	147	76	92
85°	34	51	36	46	35	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1896.0	1896.0	1896.0	1896.0	1896.0
2.5°	1895.2	1912.3	1934.6	1937.2	1938.9
5°	1884.0	1919.2	1878.0	1916.6	1937.2
7.5°	1858.3	1879.7	1909.7	1871.2	1882.3
10°	1845.5	1850.6	1850.6	1898.6	1889.2
12.5°	1816.3	1850.6	1859.2	1849.7	1870.3
15°	1801.7	1812.9	1815.5	1842.9	1844.6
17.5°	1785.5	1782.9	1776.9	1796.6	1831.7
20°	1743.5	1734.0	1752.0	1776.0	1789.7
22.5°	1681.7	1684.3	1705.7	1725.5	1740.9
25°	1609.7	1622.6	1655.2	1678.3	1689.5
27.5°	1555.7	1574.6	1596.9	1624.3	1646.6
30°	1512.9	1511.2	1526.6	1566.0	1591.7
32.5°	1429.7	1435.7	1452.0	1499.2	1535.2
35°	1345.7	1346.6	1362.9	1424.6	1459.7
37.5°	1248.9	1242.0	1251.4	1318.3	1341.4
40°	1115.2	1116.9	1107.4	1154.6	1151.2
42.5°	959.2	972.9	924.0	985.7	981.4
45°	768.9	831.4	770.6	825.4	792.0
47.5°	606.9	699.4	648.9	689.2	626.6
50°	492.0	587.2	559.7	577.7	476.6
52.5°	403.7	480.9	489.4	493.7	372.0
55°	324.0	394.3	421.7	420.9	290.6
57.5°	239.1	320.6	352.3	365.1	220.3
60°	176.6	266.6	290.6	318.9	165.4
62.5°	142.3	234.0	240.0	279.4	126.0
65°	121.7	216.0	194.6	249.4	97.7
67.5°	108.0	201.4	158.6	222.9	83.1
70°	97.7	179.1	131.1	199.7	78.0
72.5°	95.1	152.6	101.1	178.3	77.1
75°	91.7	129.4	72.9	146.6	76.3
77.5°	78.9	110.6	52.3	113.1	71.1
80°	68.6	88.3	38.6	84.9	62.6
82.5°	53.1	66.9	34.3	64.3	50.6
85°	34.3	50.6	36.0	46.3	35.1
87.5°	16.3	28.3	25.7	24.9	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)