

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: P292543

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292543
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-L83050-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: 4016.0 lumens
Efficiency: N/A
Efficacy: 124.1 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

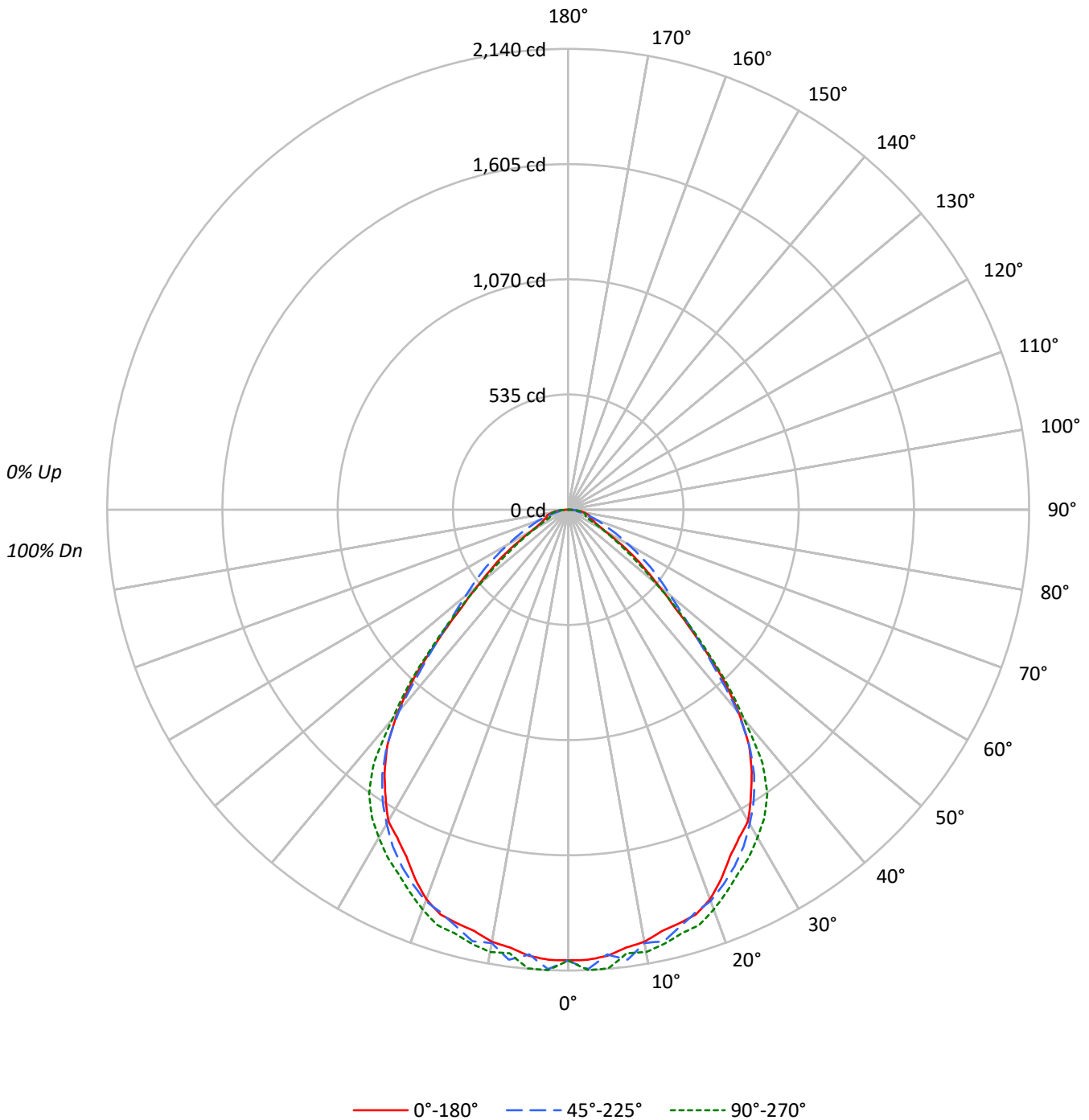
Input Watts (W): 32.364
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5632	5632	5632
5°	5618	5600	5776
10°	5567	5582	5699
15°	5541	5583	5673
20°	5511	5539	5658
25°	5276	5425	5537
30°	5189	5236	5460
35°	4880	4942	5294
40°	4324	4294	4464
45°	3230	3237	3327
50°	2274	2587	2202
55°	1678	2184	1505
60°	1049	1727	983
65°	856	1368	687
70°	849	1139	677
75°	1052	836	875
80°	1173	660	1071
85°	1167	1226	1198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.2	5.0
10°-20°	567.5	14.1
20°-30°	840.5	20.9
30°-40°	941.5	23.4
40°-50°	691.8	17.2
50°-60°	386.7	9.6
60°-70°	215.5	5.4
70°-80°	126.6	3.2
80°-90°	46.5	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°	1607.3	40.0
0°-40°	2548.8	63.5
0°-60°	3627.3	90.3
0°-90°	4016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2093	2093	2093	2093	2093	
5°	2080	2119	2073	2116	2138	197
15°	1989	2001	2004	2034	2036	562
25°	1777	1791	1827	1853	1865	824
35°	1486	1486	1504	1573	1611	920
45°	849	918	851	911	874	663
55°	358	435	466	465	321	319
65°	134	238	215	275	108	139
75°	101	143	80	162	84	102
85°	38	56	40	51	39	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2093.0	2093.0	2093.0	2093.0	2093.0
2.5°	2092.1	2111.0	2135.6	2138.4	2140.3
5°	2079.8	2118.6	2073.2	2115.7	2138.4
7.5°	2051.4	2075.0	2108.2	2065.6	2077.9
10°	2037.2	2042.9	2042.9	2095.9	2085.5
12.5°	2005.0	2042.9	2052.3	2041.9	2064.6
15°	1988.9	2001.2	2004.1	2034.4	2036.3
17.5°	1971.0	1968.1	1961.5	1983.3	2022.1
20°	1924.6	1914.2	1934.1	1960.6	1975.7
22.5°	1856.5	1859.3	1883.0	1904.7	1921.8
25°	1777.0	1791.2	1827.1	1852.7	1865.0
27.5°	1717.4	1738.2	1762.8	1793.1	1817.7
30°	1670.1	1668.2	1685.2	1728.7	1757.1
32.5°	1578.3	1584.9	1602.9	1654.9	1694.7
35°	1485.6	1486.5	1504.5	1572.6	1611.4
37.5°	1378.6	1371.1	1381.5	1455.3	1480.8
40°	1231.0	1232.9	1222.5	1274.6	1270.8
42.5°	1058.8	1074.0	1020.0	1088.1	1083.4
45°	848.8	917.8	850.6	911.2	874.3
47.5°	669.9	772.1	716.3	760.8	691.7
50°	543.1	648.2	617.9	637.7	526.1
52.5°	445.7	530.8	540.3	545.0	410.7
55°	357.7	435.3	465.5	464.6	320.8
57.5°	264.0	353.9	388.9	403.1	243.2
60°	194.9	294.3	320.8	352.0	182.6
62.5°	157.1	258.3	264.9	308.5	139.1
65°	134.4	238.4	214.8	275.3	107.9
67.5°	119.2	222.4	175.0	246.0	91.8
70°	107.9	197.8	144.8	220.5	86.1
72.5°	105.0	168.4	111.7	196.8	85.2
75°	101.2	142.9	80.4	161.8	84.2
77.5°	87.1	122.1	57.7	124.9	78.5
80°	75.7	97.5	42.6	93.7	69.1
82.5°	58.7	73.8	37.8	71.0	55.8
85°	37.8	55.8	39.7	51.1	38.8
87.5°	18.0	31.2	28.4	27.4	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)