

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: P293934

Luminaire Tested: **24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4284.0 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

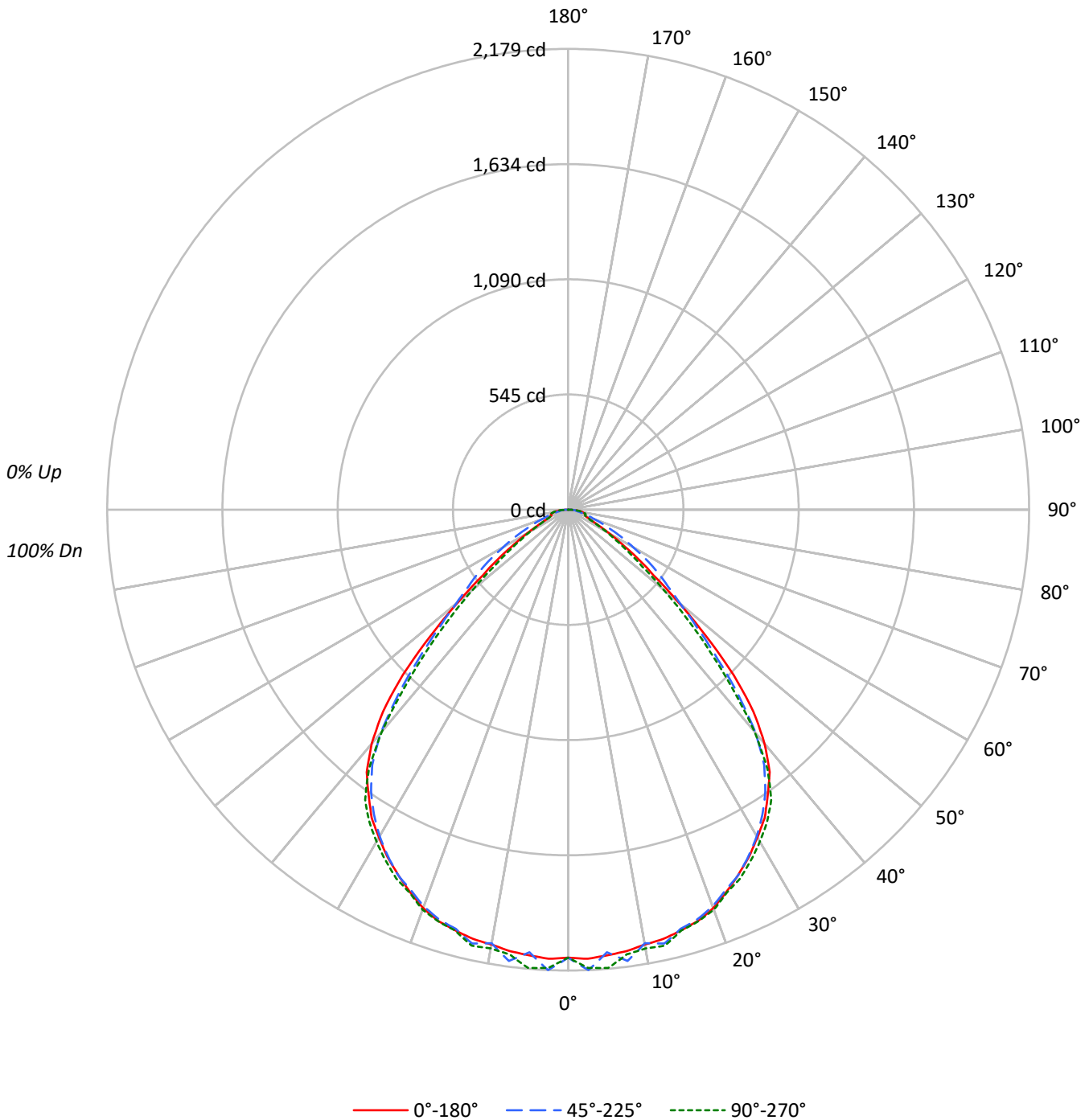
Input Watts (W): 28.644
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2850	2850	2850
5°	2856	2838	2938
10°	2852	2843	2878
15°	2868	2859	2870
20°	2871	2859	2882
25°	2826	2828	2856
30°	2779	2771	2816
35°	2701	2668	2748
40°	2536	2423	2409
45°	2102	1902	1804
50°	1414	1443	1233
55°	933	1210	809
60°	598	955	554
65°	386	729	374
70°	341	522	341
75°	440	415	443
80°	539	357	565
85°	627	531	659



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.8	4.7
10°-20°	582.4	13.6
20°-30°	876.8	20.5
30°-40°	1016.2	23.7
40°-50°	793.8	18.5
50°-60°	423.9	9.9
60°-70°	218.0	5.1
70°-80°	123.3	2.9
80°-90°	46.8	1.1
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°	1662.0	38.8
0°-40°	2678.2	62.5
0°-60°	3895.9	90.9
0°-90°	4284.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4284.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2118	2118	2118	2118	2118	
5°	2115	2174	2101	2159	2175	201
15°	2059	2072	2052	2065	2060	582
25°	1904	1898	1905	1902	1924	877
35°	1644	1637	1624	1657	1673	1025
45°	1105	1106	1000	991	948	833
55°	398	503	516	465	345	367
65°	121	252	229	252	118	133
75°	85	159	80	149	85	86
85°	41	53	34	53	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2118.3	2118.3	2118.3	2118.3	2118.3
2.5°	2125.2	2163.7	2178.9	2160.3	2168.5
5°	2114.9	2174.0	2101.1	2158.9	2175.4
7.5°	2105.2	2099.1	2152.0	2097.0	2120.4
10°	2087.4	2091.5	2081.2	2120.4	2106.6
12.5°	2079.1	2103.2	2101.1	2081.2	2111.4
15°	2059.1	2072.2	2052.3	2065.3	2060.5
17.5°	2039.2	2033.0	2030.9	2036.4	2041.3
20°	2004.8	1984.2	1996.5	1997.9	2013.1
22.5°	1955.3	1942.9	1945.6	1958.0	1959.4
25°	1903.7	1897.5	1905.0	1902.3	1923.6
27.5°	1850.0	1841.7	1846.6	1856.9	1870.0
30°	1788.8	1786.7	1783.3	1792.2	1812.2
32.5°	1728.2	1711.7	1709.0	1727.5	1750.2
35°	1644.3	1636.7	1624.3	1656.7	1673.2
37.5°	1564.5	1541.1	1521.1	1540.4	1547.3
40°	1444.1	1426.2	1379.4	1381.5	1371.8
42.5°	1296.2	1283.1	1193.7	1177.8	1151.0
45°	1104.9	1105.6	999.6	990.7	948.0
47.5°	882.7	921.9	829.7	819.4	756.1
50°	675.6	746.5	689.4	672.9	588.9
52.5°	507.0	610.9	593.0	557.3	441.7
55°	397.7	502.9	516.0	465.1	344.7
57.5°	299.3	414.2	435.5	393.5	266.3
60°	222.2	348.8	355.0	338.5	205.7
62.5°	165.1	296.5	288.3	290.3	152.7
65°	121.1	252.5	229.1	251.8	117.6
67.5°	99.1	218.8	178.2	218.1	95.6
70°	86.7	194.0	132.8	191.9	86.7
72.5°	83.9	178.2	105.3	170.6	84.6
75°	84.6	158.9	79.8	148.6	85.3
77.5°	77.7	130.7	60.5	126.6	81.2
80°	69.5	99.1	46.1	100.4	72.9
82.5°	59.2	72.2	37.2	74.3	61.2
85°	40.6	53.0	34.4	53.0	42.7
87.5°	19.3	31.6	21.3	30.3	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)