

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: P294003

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294003
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-LD5-48-A19/156-UNV-L82765-W2A1-U-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4859.0 lumens
Efficiency: N/A
Efficacy: 144.7 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

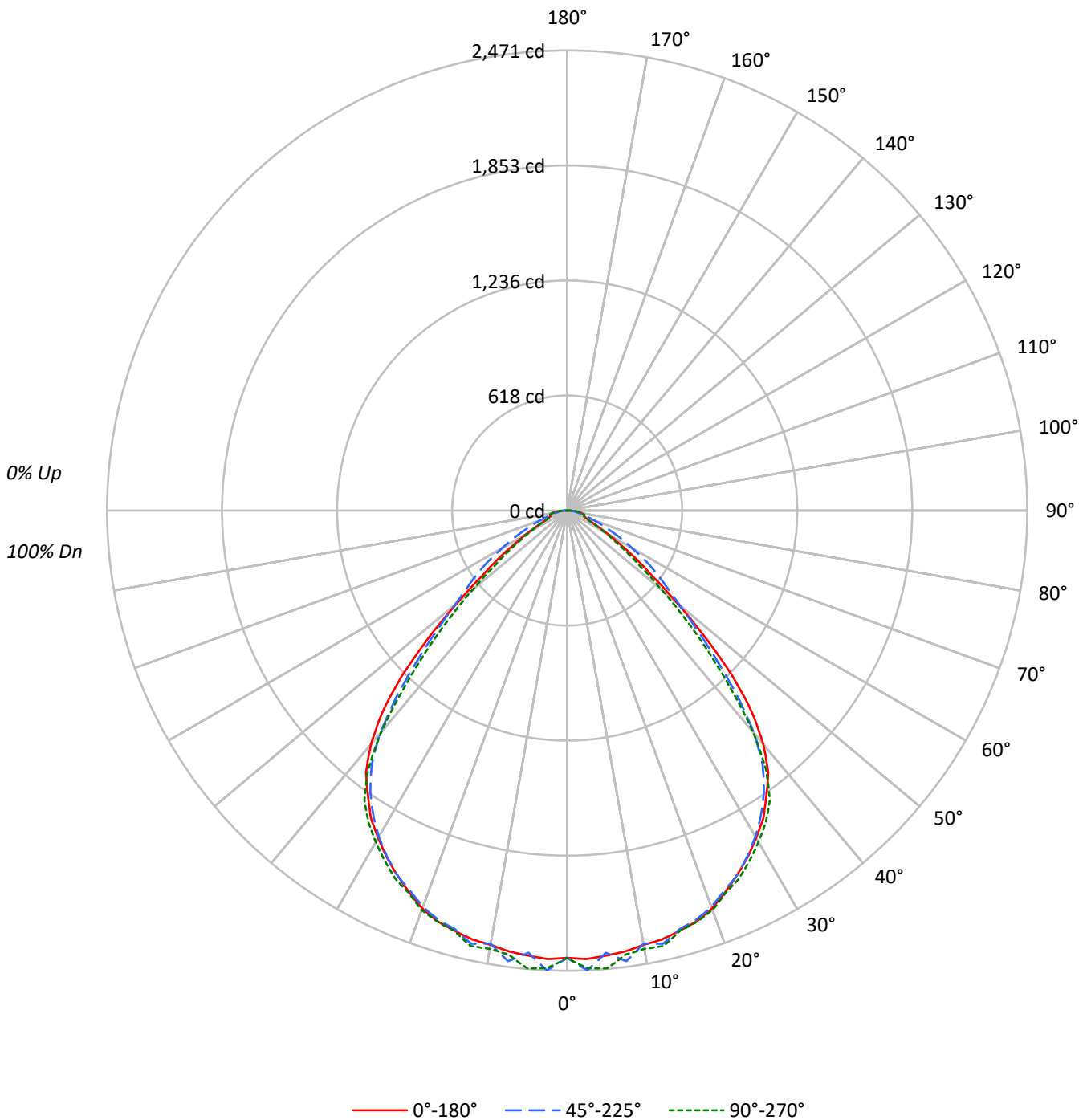
Input Watts (W): 33.573
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3233	3233	3233
5°	3240	3219	3333
10°	3235	3225	3265
15°	3253	3242	3255
20°	3256	3242	3269
25°	3206	3208	3239
30°	3152	3142	3193
35°	3063	3026	3117
40°	2877	2748	2733
45°	2385	2157	2046
50°	1604	1637	1398
55°	1058	1373	917
60°	678	1084	628
65°	437	827	425
70°	387	592	387
75°	499	470	503
80°	611	405	641
85°	710	602	747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.0	4.7
10°-20°	660.5	13.6
20°-30°	994.4	20.5
30°-40°	1152.6	23.7
40°-50°	900.4	18.5
50°-60°	480.8	9.9
60°-70°	247.2	5.1
70°-80°	139.9	2.9
80°-90°	53.1	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°	1885.0	38.8
0°-40°	3037.6	62.5
0°-60°	4418.8	90.9
0°-90°	4859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4859.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2403	2403	2403	2403	2403	
5°	2399	2466	2383	2449	2467	228
15°	2336	2350	2328	2343	2337	660
25°	2159	2152	2161	2158	2182	995
35°	1865	1856	1842	1879	1898	1163
45°	1253	1254	1134	1124	1075	944
55°	451	570	585	528	391	416
65°	137	286	260	286	133	151
75°	96	180	90	169	97	97
85°	46	60	39	60	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2402.6	2402.6	2402.6	2402.6	2402.6
2.5°	2410.4	2454.1	2471.3	2450.2	2459.6
5°	2398.7	2465.8	2383.1	2448.7	2467.4
7.5°	2387.8	2380.8	2440.9	2378.4	2405.0
10°	2367.5	2372.2	2360.5	2405.0	2389.4
12.5°	2358.2	2385.5	2383.1	2360.5	2394.8
15°	2335.5	2350.4	2327.7	2342.6	2337.1
17.5°	2312.9	2305.9	2303.5	2309.8	2315.2
20°	2273.9	2250.5	2264.5	2266.1	2283.2
22.5°	2217.7	2203.7	2206.8	2220.8	2222.4
25°	2159.2	2152.2	2160.7	2157.6	2181.8
27.5°	2098.3	2088.9	2094.4	2106.1	2120.9
30°	2028.9	2026.5	2022.6	2032.8	2055.4
32.5°	1960.2	1941.5	1938.3	1959.4	1985.2
35°	1865.0	1856.4	1842.4	1879.0	1897.8
37.5°	1774.5	1747.9	1725.3	1747.2	1755.0
40°	1637.9	1617.6	1564.6	1566.9	1556.0
42.5°	1470.1	1455.3	1353.9	1335.9	1305.5
45°	1253.2	1254.0	1133.8	1123.7	1075.3
47.5°	1001.2	1045.6	941.1	929.4	857.6
50°	766.3	846.7	781.9	763.2	668.0
52.5°	575.1	692.9	672.6	632.1	501.0
55°	451.0	570.4	585.2	527.5	390.9
57.5°	339.4	469.8	493.9	446.3	302.0
60°	252.0	395.6	402.7	383.9	233.3
62.5°	187.3	336.3	327.0	329.3	173.2
65°	137.3	286.4	259.8	285.6	133.4
67.5°	112.4	248.1	202.1	247.4	108.5
70°	98.3	220.1	150.6	217.7	98.3
72.5°	95.2	202.1	119.4	193.5	96.0
75°	96.0	180.3	90.5	168.6	96.8
77.5°	88.2	148.3	68.7	143.6	92.1
80°	78.8	112.4	52.3	113.9	82.7
82.5°	67.1	81.9	42.1	84.3	69.4
85°	46.0	60.1	39.0	60.1	48.4
87.5°	21.8	35.9	24.2	34.3	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)