

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: P293937

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293937
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-L83050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4460.0 lumens
Efficiency: N/A
Efficacy: 136.2 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

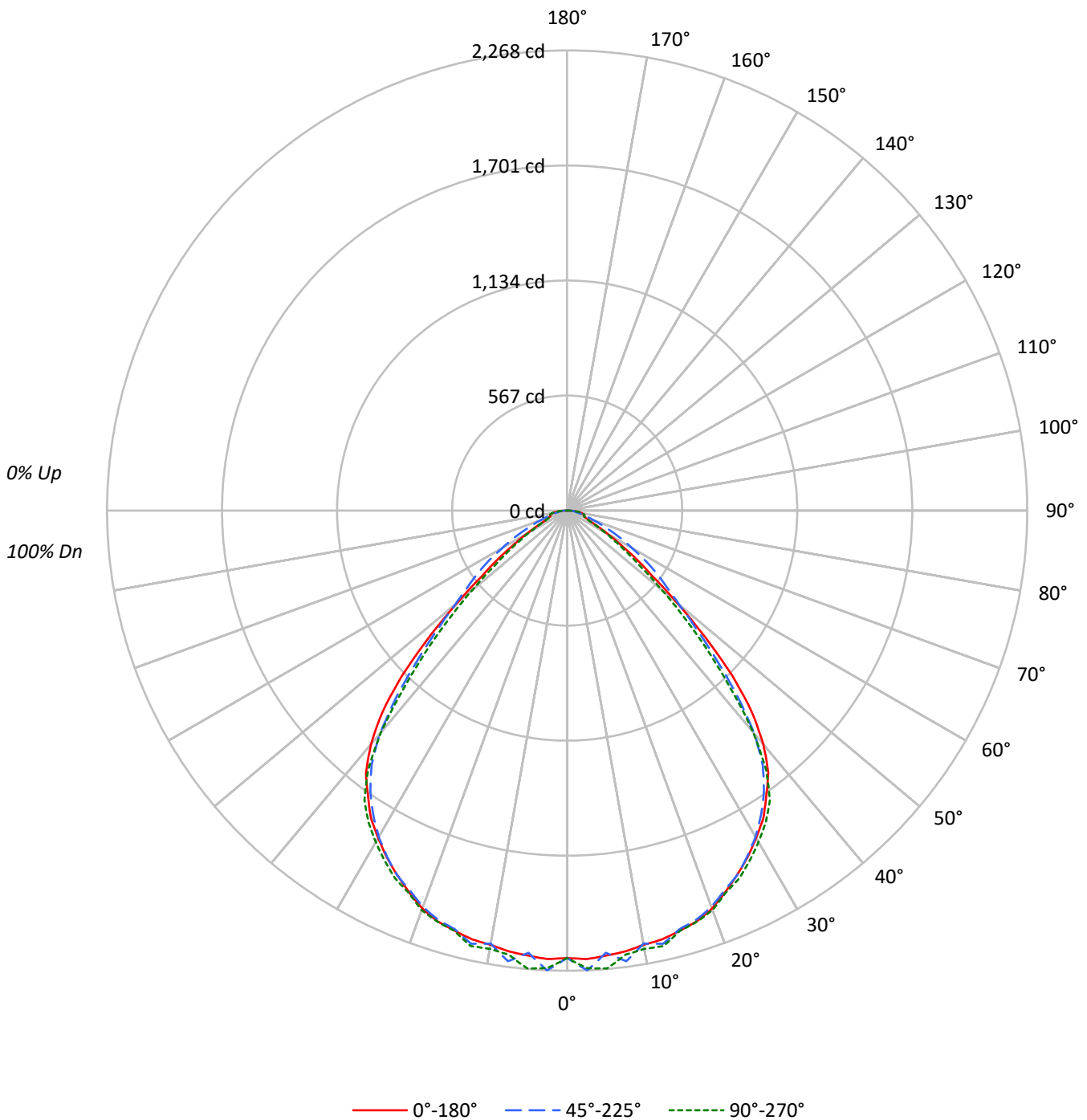
Input Watts (W): 32.736
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293937

CATALOG NUMBER: 24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P293937

CATALOG NUMBER: 24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3000K

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°	2967	2967	2967
5°	2974	2954	3059
10°	2969	2960	2996
15°	2986	2976	2988
20°	2989	2976	3001
25°	2942	2944	2973
30°	2893	2884	2931
35°	2812	2778	2861
40°	2641	2522	2509
45°	2189	1980	1878
50°	1472	1502	1283
55°	971	1260	842
60°	622	995	576
65°	401	759	390
70°	355	544	355
75°	458	432	462
80°	560	372	588
85°	653	553	685



TEST NUMBER: P293937

CATALOG NUMBER: 24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.2	4.7
10°-20°	606.3	13.6
20°-30°	912.8	20.5
30°-40°	1058.0	23.7
40°-50°	826.4	18.5
50°-60°	441.3	9.9
60°-70°	226.9	5.1
70°-80°	128.4	2.9
80°-90°	48.8	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°	1730.2	38.8
0°-40°	2788.2	62.5
0°-60°	4055.9	90.9
0°-90°	4460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2205	2205	2205	2205	2205	
5°	2202	2263	2187	2248	2265	209
15°	2144	2157	2137	2150	2145	605
25°	1982	1975	1983	1980	2003	913
35°	1712	1704	1691	1725	1742	1067
45°	1150	1151	1041	1031	987	867
55°	414	524	537	484	359	382
65°	126	263	238	262	122	139
75°	88	166	83	155	89	89
85°	42	55	36	55	44	44
90°	0	0	0	0	0	



TEST NUMBER: P293937

CATALOG NUMBER: 24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2205.3	2205.3	2205.3	2205.3	2205.3
2.5°	2212.5	2252.6	2268.4	2249.0	2257.6
5°	2201.8	2263.4	2187.4	2247.6	2264.8
7.5°	2191.7	2185.3	2240.4	2183.1	2207.5
10°	2173.1	2177.4	2166.7	2207.5	2193.2
12.5°	2164.5	2189.6	2187.4	2166.7	2198.2
15°	2143.7	2157.4	2136.6	2150.2	2145.2
17.5°	2123.0	2116.5	2114.4	2120.1	2125.1
20°	2087.2	2065.7	2078.6	2080.0	2095.8
22.5°	2035.6	2022.7	2025.6	2038.5	2039.9
25°	1981.9	1975.4	1983.3	1980.4	2002.6
27.5°	1926.0	1917.4	1922.4	1933.2	1946.8
30°	1862.3	1860.1	1856.5	1865.8	1886.6
32.5°	1799.2	1782.0	1779.2	1798.5	1822.1
35°	1711.8	1704.0	1691.1	1724.7	1741.9
37.5°	1628.8	1604.4	1583.6	1603.7	1610.9
40°	1503.4	1484.8	1436.1	1438.2	1428.2
42.5°	1349.4	1335.8	1242.7	1226.2	1198.3
45°	1150.3	1151.0	1040.7	1031.4	987.0
47.5°	919.0	959.8	863.8	853.1	787.2
50°	703.4	777.1	717.7	700.5	613.1
52.5°	527.9	636.0	617.4	580.2	459.8
55°	414.0	523.6	537.2	484.2	358.8
57.5°	311.6	431.2	453.4	409.7	277.2
60°	231.3	363.1	369.6	352.4	214.2
62.5°	171.9	308.7	300.1	302.3	159.0
65°	126.1	262.9	238.5	262.1	122.5
67.5°	103.1	227.8	185.5	227.1	99.6
70°	90.2	202.0	138.2	199.8	90.2
72.5°	87.4	185.5	109.6	177.6	88.1
75°	88.1	165.5	83.1	154.7	88.8
77.5°	80.9	136.1	63.0	131.8	84.5
80°	72.3	103.1	48.0	104.6	75.9
82.5°	61.6	75.2	38.7	77.4	63.7
85°	42.3	55.2	35.8	55.2	44.4
87.5°	20.1	32.9	22.2	31.5	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)