

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: P294008

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294008
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-LD5-56-A19/156-UNV-L82765-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: 5178.0 lumens
Efficiency: N/A
Efficacy: 133.8 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

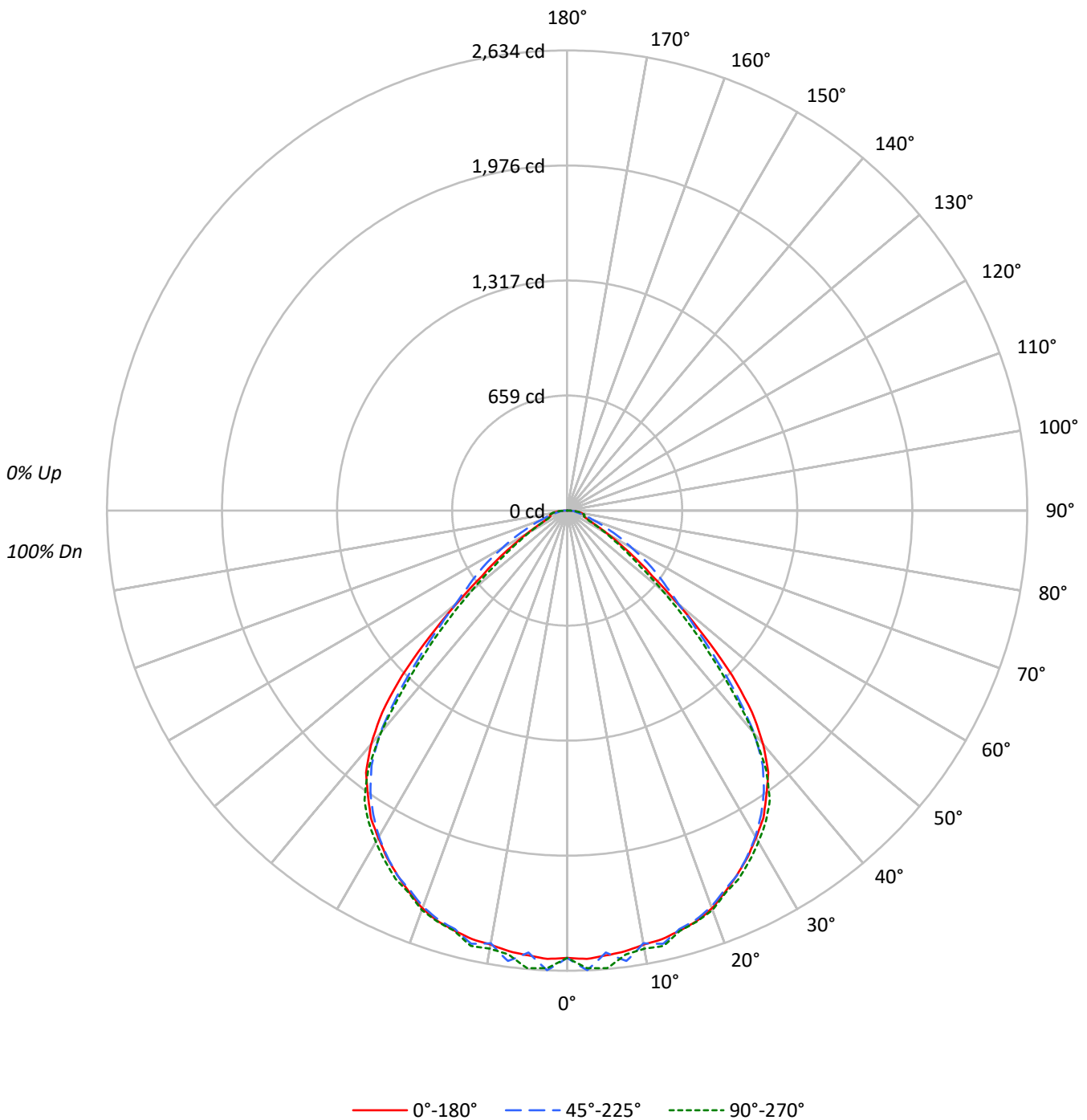
Input Watts (W): 38.688
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294008

CATALOG NUMBER: 24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P294008

CATALOG NUMBER: 24GR-LD5-56-A19/156-UNV-L82765-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°	3445	3445	3445
5°	3452	3430	3551
10°	3447	3437	3479
15°	3467	3455	3469
20°	3470	3455	3484
25°	3416	3418	3452
30°	3359	3349	3403
35°	3264	3225	3322
40°	3066	2928	2912
45°	2541	2299	2180
50°	1709	1744	1490
55°	1127	1463	977
60°	723	1155	669
65°	466	882	453
70°	412	631	412
75°	532	502	536
80°	651	432	683
85°	758	642	797



TEST NUMBER: P294008

CATALOG NUMBER: 24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.1	4.7
10°-20°	703.9	13.6
20°-30°	1059.7	20.5
30°-40°	1228.3	23.7
40°-50°	959.5	18.5
50°-60°	512.3	9.9
60°-70°	263.5	5.1
70°-80°	149.0	2.9
80°-90°	56.6	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°	2008.8	38.8
0°-40°	3237.1	62.5
0°-60°	4708.9	90.9
0°-90°	5178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5178.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2560	2560	2560	2560	2560	
5°	2556	2628	2540	2609	2629	243
15°	2489	2505	2480	2496	2490	703
25°	2301	2293	2303	2299	2325	1060
35°	1987	1978	1963	2002	2022	1239
45°	1336	1336	1208	1197	1146	1006
55°	481	608	624	562	417	444
65°	146	305	277	304	142	161
75°	102	192	96	180	103	104
85°	49	64	42	64	52	51
90°	0	0	0	0	0	



TEST NUMBER: P294008

CATALOG NUMBER: 24GR-LD5-56-A19/156-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2560.4	2560.4	2560.4	2560.4	2560.4
2.5°	2568.7	2615.3	2633.5	2611.1	2621.1
5°	2556.2	2627.7	2539.6	2609.4	2629.4
7.5°	2544.6	2537.1	2601.1	2534.6	2562.9
10°	2523.0	2527.9	2515.5	2562.9	2546.2
12.5°	2513.0	2542.1	2539.6	2515.5	2552.1
15°	2488.9	2504.7	2480.5	2496.3	2490.5
17.5°	2464.7	2457.3	2454.8	2461.4	2467.2
20°	2423.2	2398.2	2413.2	2414.8	2433.1
22.5°	2363.3	2348.3	2351.7	2366.6	2368.3
25°	2300.9	2293.4	2302.6	2299.3	2325.0
27.5°	2236.1	2226.1	2231.9	2244.4	2260.2
30°	2162.1	2159.6	2155.4	2166.2	2190.3
32.5°	2088.9	2068.9	2065.6	2088.0	2115.5
35°	1987.4	1978.3	1963.3	2002.4	2022.4
37.5°	1891.0	1862.7	1838.6	1861.9	1870.2
40°	1745.4	1723.8	1667.3	1669.8	1658.1
42.5°	1566.7	1550.9	1442.8	1423.6	1391.2
45°	1335.5	1336.3	1208.3	1197.4	1145.9
47.5°	1066.9	1114.3	1002.9	990.4	913.9
50°	816.6	902.2	833.2	813.3	711.8
52.5°	612.9	738.4	716.8	673.6	533.9
55°	480.6	607.9	623.7	562.1	416.6
57.5°	361.7	500.6	526.4	475.7	321.8
60°	268.6	421.6	429.1	409.1	248.6
62.5°	199.6	358.4	348.4	350.9	184.6
65°	146.4	305.2	276.9	304.4	142.2
67.5°	119.7	264.4	215.4	263.6	115.6
70°	104.8	234.5	160.5	232.0	104.8
72.5°	101.5	215.4	127.2	206.2	102.3
75°	102.3	192.1	96.5	179.6	103.1
77.5°	94.0	158.0	73.2	153.0	98.1
80°	84.0	119.7	55.7	121.4	88.1
82.5°	71.5	87.3	44.9	89.8	74.0
85°	49.1	64.0	41.6	64.0	51.6
87.5°	23.3	38.3	25.8	36.6	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)