

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: P294163

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294163
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-LD5-85-A19/156-UNV-L92765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7125.0 lumens
Efficiency: N/A
Efficacy: 112.8 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

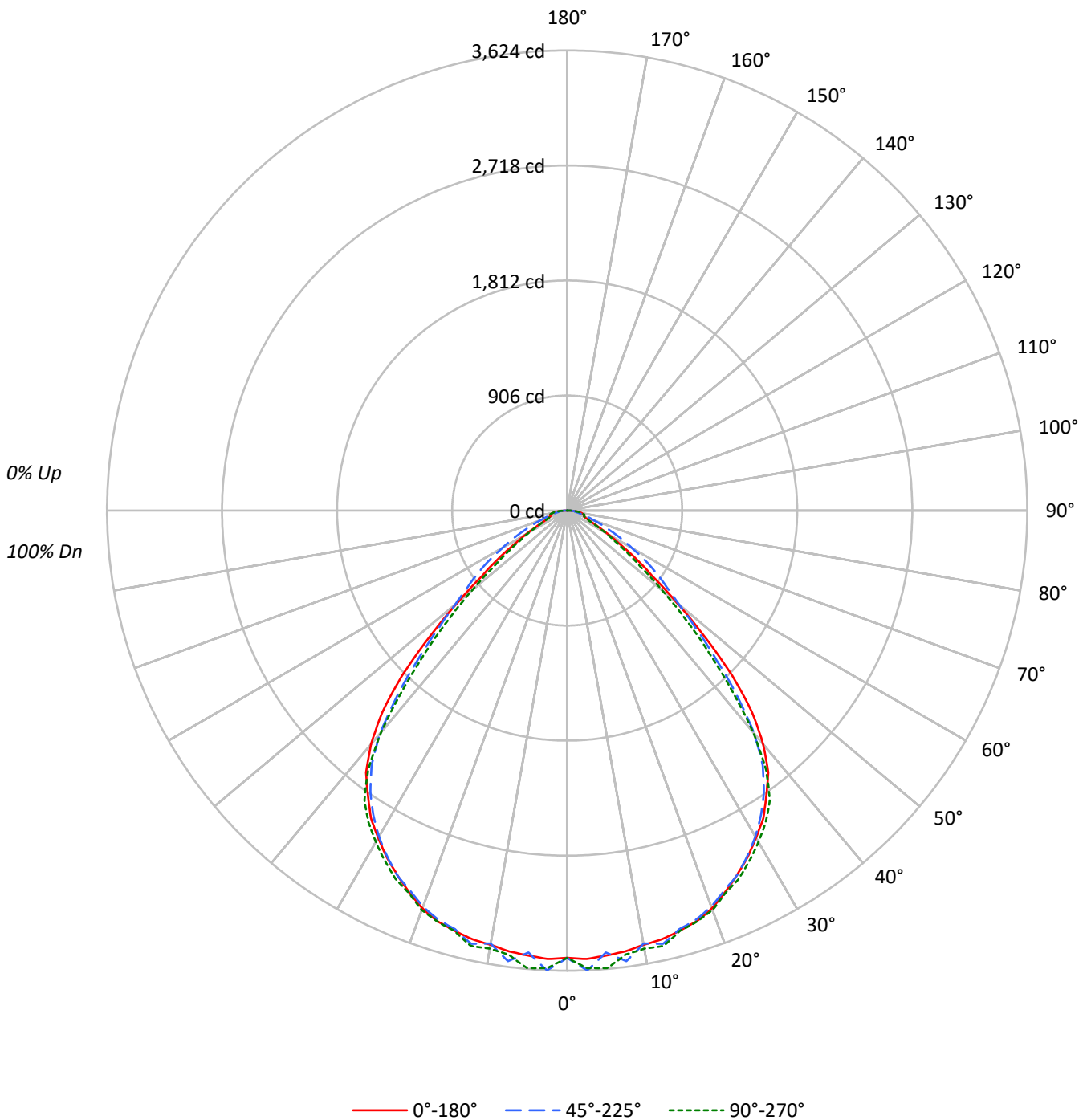
Input Watts (W): 63.147
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4740	4740	4740
5°	4751	4720	4887
10°	4743	4729	4787
15°	4770	4755	4774
20°	4774	4755	4794
25°	4700	4704	4750
30°	4622	4608	4683
35°	4492	4437	4571
40°	4219	4030	4007
45°	3497	3164	3000
50°	2352	2400	2050
55°	1552	2013	1345
60°	995	1589	921
65°	641	1213	623
70°	567	869	567
75°	731	690	738
80°	896	594	940
85°	1042	883	1095



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.3	4.7
10°-20°	968.6	13.6
20°-30°	1458.2	20.5
30°-40°	1690.1	23.7
40°-50°	1320.3	18.5
50°-60°	705.0	9.9
60°-70°	362.5	5.1
70°-80°	205.1	2.9
80°-90°	77.9	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°	2764.1	38.8
0°-40°	4454.2	62.5
0°-60°	6479.5	90.9
0°-90°	7125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3523	3523	3523	3523	3523	
5°	3517	3616	3494	3591	3618	334
15°	3425	3446	3413	3435	3427	967
25°	3166	3156	3168	3164	3199	1459
35°	2735	2722	2702	2755	2783	1705
45°	1838	1839	1663	1648	1577	1385
55°	661	836	858	774	573	610
65°	201	420	381	419	196	221
75°	141	264	133	247	142	143
85°	68	88	57	88	71	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3523.1	3523.1	3523.1	3523.1	3523.1
2.5°	3534.6	3598.6	3623.8	3592.9	3606.6
5°	3517.4	3615.8	3494.5	3590.6	3618.1
7.5°	3501.4	3491.1	3579.2	3487.6	3526.5
10°	3471.6	3478.5	3461.3	3526.5	3503.7
12.5°	3457.9	3497.9	3494.5	3461.3	3511.7
15°	3424.7	3446.4	3413.3	3435.0	3427.0
17.5°	3391.5	3381.2	3377.8	3386.9	3395.0
20°	3334.3	3300.0	3320.6	3322.9	3348.0
22.5°	3251.9	3231.3	3235.9	3256.5	3258.8
25°	3166.1	3155.8	3168.4	3163.8	3199.3
27.5°	3076.9	3063.1	3071.1	3088.3	3110.0
30°	2975.0	2971.6	2965.9	2980.7	3013.9
32.5°	2874.3	2846.9	2842.3	2873.2	2910.9
35°	2734.7	2722.1	2701.5	2755.3	2782.8
37.5°	2602.0	2563.1	2529.9	2561.9	2573.4
40°	2401.8	2372.0	2294.2	2297.6	2281.6
42.5°	2155.7	2134.0	1985.3	1958.9	1914.3
45°	1837.6	1838.8	1662.6	1647.7	1576.8
47.5°	1468.1	1533.3	1380.0	1362.8	1257.5
50°	1123.6	1241.5	1146.5	1119.1	979.5
52.5°	843.3	1016.1	986.3	926.8	734.6
55°	661.4	836.4	858.2	773.5	573.3
57.5°	497.7	688.8	724.3	654.5	442.8
60°	369.6	580.1	590.4	563.0	342.1
62.5°	274.6	493.2	479.4	482.9	254.0
65°	201.4	419.9	381.0	418.8	195.7
67.5°	164.8	363.9	296.4	362.7	159.0
70°	144.2	322.7	220.8	319.2	144.2
72.5°	139.6	296.4	175.1	283.8	140.7
75°	140.7	264.3	132.7	247.2	141.9
77.5°	129.3	217.4	100.7	210.5	135.0
80°	115.6	164.8	76.7	167.1	121.3
82.5°	98.4	120.1	61.8	123.6	101.8
85°	67.5	88.1	57.2	88.1	70.9
87.5°	32.0	52.6	35.5	50.3	36.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)