

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: P293983

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293983
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-LD5-38-A19/156-UNV-L82765-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: 3738.0 lumens
Efficiency: N/A
Efficacy: 145.6 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

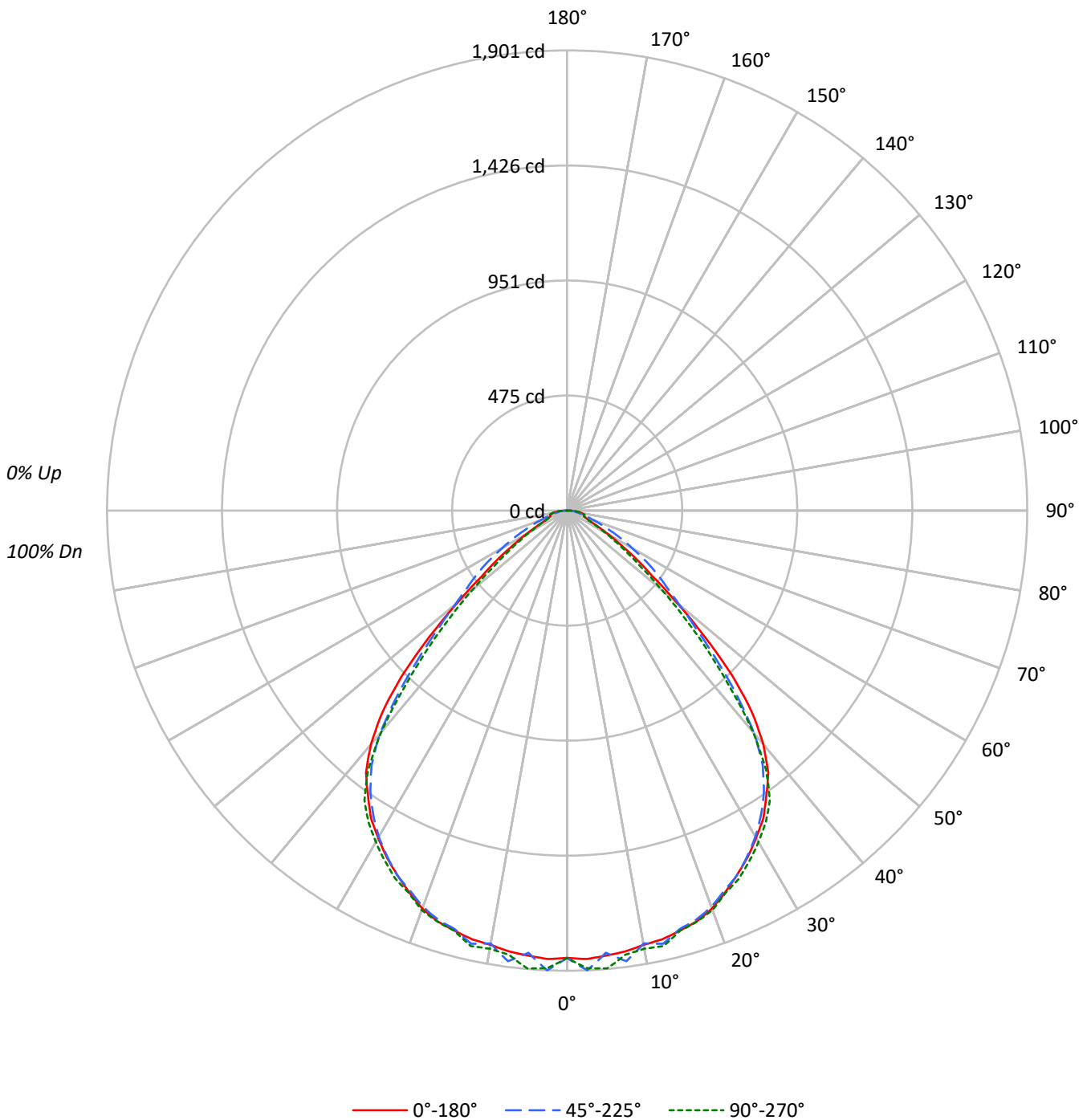
Input Watts (W): 25.668
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2487	2487	2487
5°	2492	2476	2564
10°	2488	2481	2511
15°	2503	2494	2504
20°	2505	2494	2515
25°	2466	2468	2492
30°	2425	2417	2457
35°	2357	2328	2398
40°	2213	2114	2102
45°	1834	1660	1574
50°	1234	1259	1076
55°	814	1056	706
60°	522	834	483
65°	337	636	327
70°	297	456	297
75°	384	362	387
80°	470	311	493
85°	546	463	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	4.7
10°-20°	508.1	13.6
20°-30°	765.0	20.5
30°-40°	886.7	23.7
40°-50°	692.7	18.5
50°-60°	369.9	9.9
60°-70°	190.2	5.1
70°-80°	107.6	2.9
80°-90°	40.8	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°	1450.1	38.8
0°-40°	2336.8	62.5
0°-60°	3399.4	90.9
0°-90°	3738.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3738.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1848	1848	1848	1848	1848	
5°	1845	1897	1833	1884	1898	175
15°	1797	1808	1791	1802	1798	507
25°	1661	1656	1662	1660	1678	765
35°	1435	1428	1417	1446	1460	894
45°	964	965	872	864	827	727
55°	347	439	450	406	301	320
65°	106	220	200	220	103	116
75°	74	139	70	130	74	75
85°	35	46	30	46	37	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1848.3	1848.3	1848.3	1848.3	1848.3
2.5°	1854.3	1888.0	1901.2	1885.0	1892.2
5°	1845.3	1897.0	1833.3	1883.8	1898.2
7.5°	1836.9	1831.5	1877.7	1829.7	1850.1
10°	1821.3	1824.9	1815.9	1850.1	1838.1
12.5°	1814.1	1835.1	1833.3	1815.9	1842.3
15°	1796.7	1808.1	1790.7	1802.1	1797.9
17.5°	1779.3	1773.9	1772.1	1776.9	1781.1
20°	1749.3	1731.3	1742.1	1743.3	1756.5
22.5°	1706.1	1695.3	1697.7	1708.5	1709.7
25°	1661.0	1655.6	1662.2	1659.8	1678.4
27.5°	1614.2	1607.0	1611.2	1620.2	1631.6
30°	1560.8	1559.0	1556.0	1563.8	1581.2
32.5°	1508.0	1493.6	1491.2	1507.4	1527.2
35°	1434.7	1428.1	1417.3	1445.5	1459.9
37.5°	1365.1	1344.7	1327.3	1344.1	1350.1
40°	1260.0	1244.4	1203.6	1205.4	1197.0
42.5°	1131.0	1119.6	1041.5	1027.7	1004.3
45°	964.1	964.7	872.2	864.4	827.2
47.5°	770.2	804.4	724.0	715.0	659.7
50°	589.5	651.3	601.5	587.1	513.9
52.5°	442.4	533.1	517.5	486.2	385.4
55°	347.0	438.8	450.2	405.8	300.8
57.5°	261.1	361.4	380.0	343.4	232.3
60°	193.9	304.4	309.8	295.3	179.5
62.5°	144.1	258.7	251.5	253.3	133.3
65°	105.7	220.3	199.9	219.7	102.7
67.5°	86.4	190.9	155.5	190.3	83.4
70°	75.6	169.3	115.9	167.5	75.6
72.5°	73.2	155.5	91.8	148.9	73.8
75°	73.8	138.7	69.6	129.7	74.4
77.5°	67.8	114.1	52.8	110.5	70.8
80°	60.6	86.4	40.2	87.6	63.6
82.5°	51.6	63.0	32.4	64.8	53.4
85°	35.4	46.2	30.0	46.2	37.2
87.5°	16.8	27.6	18.6	26.4	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)