

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: P293973

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293973
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-LD5-34-A19/156-UNV-L82765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3318.0 lumens
Efficiency: N/A
Efficacy: 143.9 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

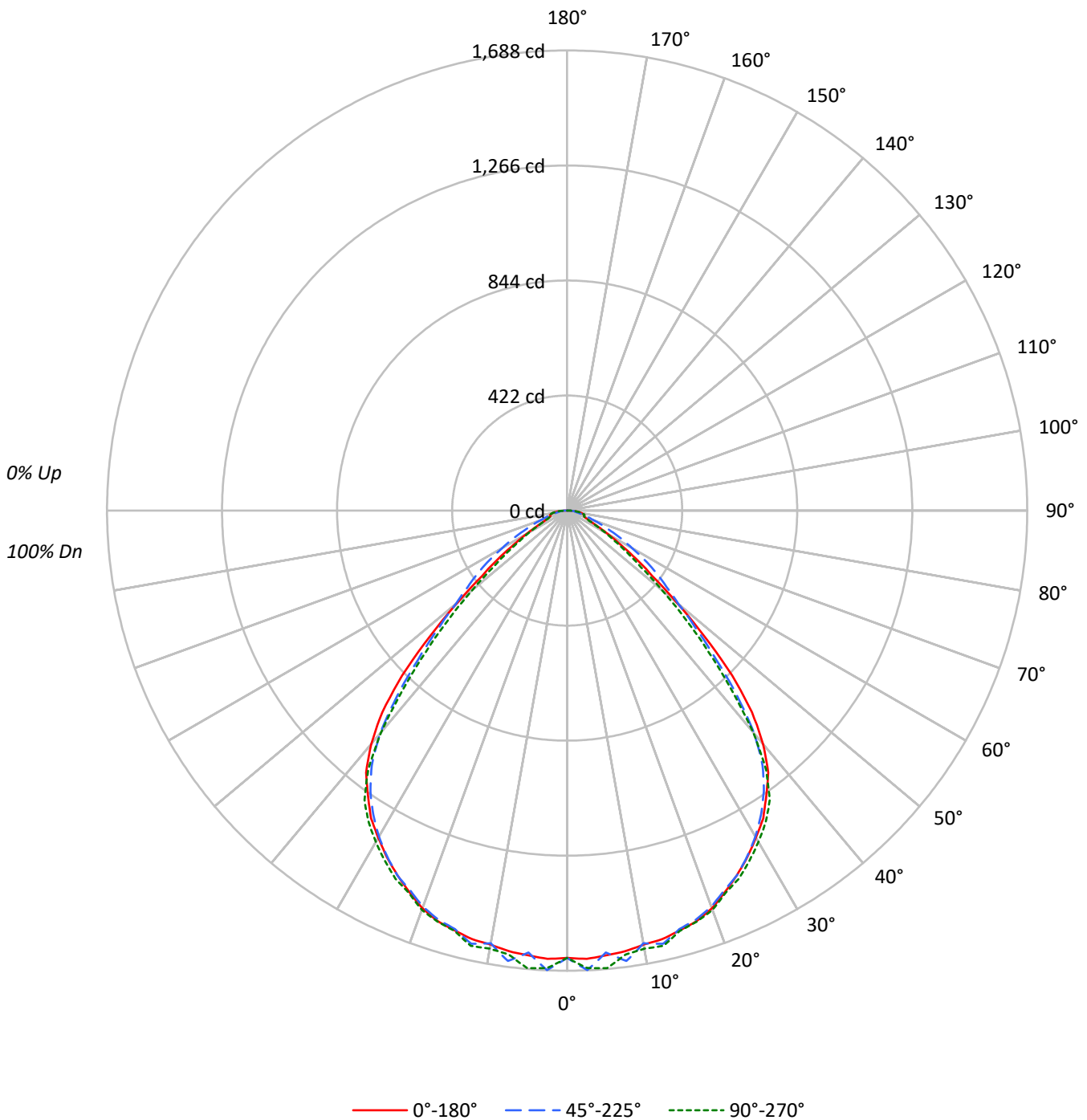
Input Watts (W): 23.064
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2208	2208	2208
5°	2212	2198	2276
10°	2209	2202	2229
15°	2221	2214	2223
20°	2223	2214	2232
25°	2189	2191	2212
30°	2152	2146	2181
35°	2092	2066	2129
40°	1965	1877	1866
45°	1628	1473	1397
50°	1095	1118	955
55°	723	937	626
60°	463	740	429
65°	299	565	290
70°	264	404	264
75°	341	321	344
80°	417	277	438
85°	485	411	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.1	4.7
10°-20°	451.1	13.6
20°-30°	679.1	20.5
30°-40°	787.1	23.7
40°-50°	614.8	18.5
50°-60°	328.3	9.9
60°-70°	168.8	5.1
70°-80°	95.5	2.9
80°-90°	36.2	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°	1287.2	38.8
0°-40°	2074.3	62.5
0°-60°	3017.4	90.9
0°-90°	3318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1641	1641	1641	1641	1641	
5°	1638	1684	1627	1672	1685	156
15°	1595	1605	1590	1600	1596	450
25°	1474	1470	1476	1473	1490	679
35°	1274	1268	1258	1283	1296	794
45°	856	856	774	767	734	645
55°	308	390	400	360	267	284
65°	94	196	177	195	91	103
75°	66	123	62	115	66	66
85°	31	41	27	41	33	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1640.7	1640.7	1640.7	1640.7	1640.7
2.5°	1646.0	1675.8	1687.5	1673.2	1679.6
5°	1638.0	1683.8	1627.3	1672.1	1684.9
7.5°	1630.5	1625.7	1666.8	1624.1	1642.3
10°	1616.7	1619.9	1611.9	1642.3	1631.6
12.5°	1610.3	1628.9	1627.3	1611.9	1635.3
15°	1594.8	1605.0	1589.5	1599.6	1595.9
17.5°	1579.4	1574.6	1573.0	1577.2	1581.0
20°	1552.7	1536.7	1546.3	1547.4	1559.1
22.5°	1514.4	1504.8	1506.9	1516.5	1517.6
25°	1474.4	1469.6	1475.5	1473.3	1489.9
27.5°	1432.8	1426.4	1430.2	1438.2	1448.3
30°	1385.4	1383.8	1381.2	1388.1	1403.5
32.5°	1338.5	1325.7	1323.6	1338.0	1355.6
35°	1273.5	1267.7	1258.1	1283.1	1295.9
37.5°	1211.7	1193.6	1178.1	1193.1	1198.4
40°	1118.5	1104.6	1068.4	1070.0	1062.5
42.5°	1003.9	993.8	924.5	912.2	891.5
45°	855.8	856.3	774.2	767.3	734.3
47.5°	683.7	714.0	642.6	634.6	585.6
50°	523.3	578.1	533.9	521.1	456.1
52.5°	392.7	473.2	459.3	431.6	342.1
55°	308.0	389.5	399.6	360.2	267.0
57.5°	231.8	320.8	337.3	304.8	206.2
60°	172.1	270.2	275.0	262.2	159.3
62.5°	127.9	229.7	223.3	224.9	118.3
65°	93.8	195.6	177.4	195.0	91.1
67.5°	76.7	169.4	138.0	168.9	74.1
70°	67.1	150.3	102.8	148.7	67.1
72.5°	65.0	138.0	81.5	132.1	65.5
75°	65.5	123.1	61.8	115.1	66.1
77.5°	60.2	101.2	46.9	98.0	62.9
80°	53.8	76.7	35.7	77.8	56.5
82.5°	45.8	55.9	28.8	57.5	47.4
85°	31.4	41.0	26.6	41.0	33.0
87.5°	14.9	24.5	16.5	23.4	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)