

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: P293972

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293972
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-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: 3208.0 lumens
Efficiency: N/A
Efficacy: 140.8 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

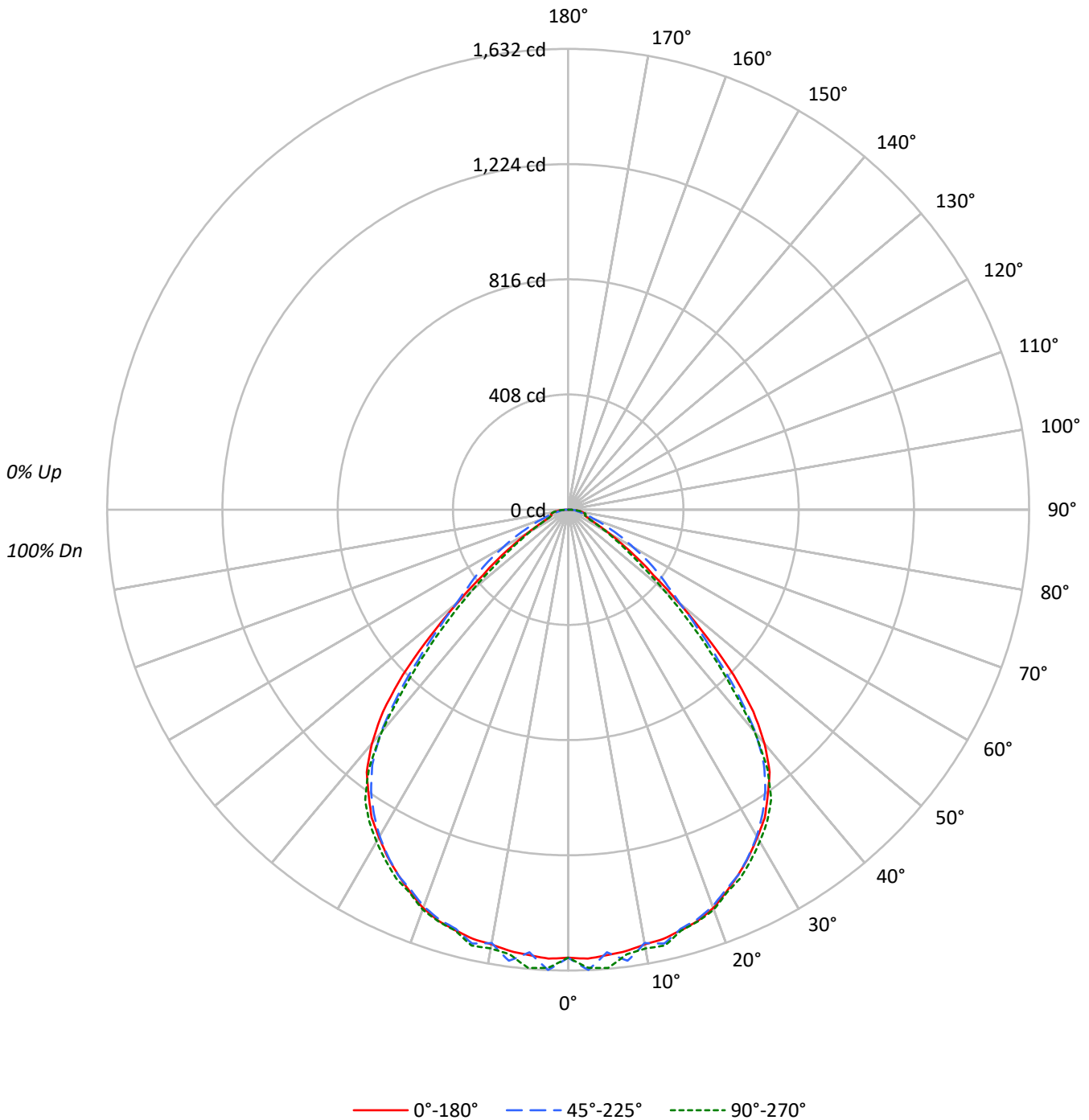
Input Watts (W): 22.785
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2134	2134	2134
5°	2139	2125	2200
10°	2136	2129	2155
15°	2148	2141	2149
20°	2150	2141	2158
25°	2116	2118	2139
30°	2081	2075	2108
35°	2022	1998	2058
40°	1899	1814	1804
45°	1574	1424	1351
50°	1059	1081	923
55°	699	906	605
60°	448	715	414
65°	289	546	280
70°	255	391	255
75°	330	311	332
80°	403	267	423
85°	469	398	492



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	4.7
10°-20°	436.1	13.6
20°-30°	656.6	20.5
30°-40°	761.0	23.7
40°-50°	594.5	18.5
50°-60°	317.4	9.9
60°-70°	163.2	5.1
70°-80°	92.3	2.9
80°-90°	35.1	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°	1244.5	38.8
0°-40°	2005.5	62.5
0°-60°	2917.4	90.9
0°-90°	3208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3208.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1586	1586	1586	1586	1586	
5°	1584	1628	1573	1617	1629	151
15°	1542	1552	1537	1547	1543	436
25°	1426	1421	1427	1424	1440	657
35°	1231	1226	1216	1241	1253	768
45°	827	828	749	742	710	623
55°	298	377	386	348	258	275
65°	91	189	172	189	88	100
75°	63	119	60	111	64	64
85°	30	40	26	40	32	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1586.3	1586.3	1586.3	1586.3	1586.3
2.5°	1591.4	1620.3	1631.6	1617.7	1623.9
5°	1583.7	1628.0	1573.4	1616.7	1629.0
7.5°	1576.5	1571.8	1611.5	1570.3	1587.8
10°	1563.1	1566.2	1558.4	1587.8	1577.5
12.5°	1556.9	1574.9	1573.4	1558.4	1581.1
15°	1542.0	1551.7	1536.8	1546.6	1543.0
17.5°	1527.0	1522.4	1520.8	1525.0	1528.6
20°	1501.3	1485.8	1495.1	1496.1	1507.4
22.5°	1464.2	1454.9	1457.0	1466.2	1467.3
25°	1425.5	1420.9	1426.6	1424.5	1440.5
27.5°	1385.3	1379.2	1382.8	1390.5	1400.3
30°	1339.5	1337.9	1335.4	1342.1	1357.0
32.5°	1294.2	1281.8	1279.7	1293.6	1310.6
35°	1231.3	1225.6	1216.4	1240.6	1252.9
37.5°	1171.5	1154.0	1139.1	1153.5	1158.7
40°	1081.4	1068.0	1033.0	1034.5	1027.3
42.5°	970.6	960.8	893.9	882.0	861.9
45°	827.4	827.9	748.6	741.9	709.9
47.5°	661.0	690.4	621.3	613.6	566.2
50°	505.9	559.0	516.2	503.9	441.0
52.5°	379.7	457.5	444.1	417.3	330.8
55°	297.8	376.6	386.4	348.3	258.1
57.5°	224.1	310.1	326.1	294.7	199.4
60°	166.4	261.2	265.8	253.5	154.0
62.5°	123.6	222.0	215.9	217.4	114.4
65°	90.7	189.1	171.6	188.6	88.1
67.5°	74.2	163.8	133.4	163.3	71.6
70°	64.9	145.3	99.4	143.7	64.9
72.5°	62.9	133.4	78.8	127.8	63.4
75°	63.4	119.0	59.8	111.3	63.9
77.5°	58.2	97.9	45.3	94.8	60.8
80°	52.0	74.2	34.5	75.2	54.6
82.5°	44.3	54.1	27.8	55.6	45.9
85°	30.4	39.7	25.8	39.7	31.9
87.5°	14.4	23.7	16.0	22.7	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)