

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: P294106

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294106
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-L92765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2935.0 lumens
Efficiency: N/A
Efficacy: 116.0 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

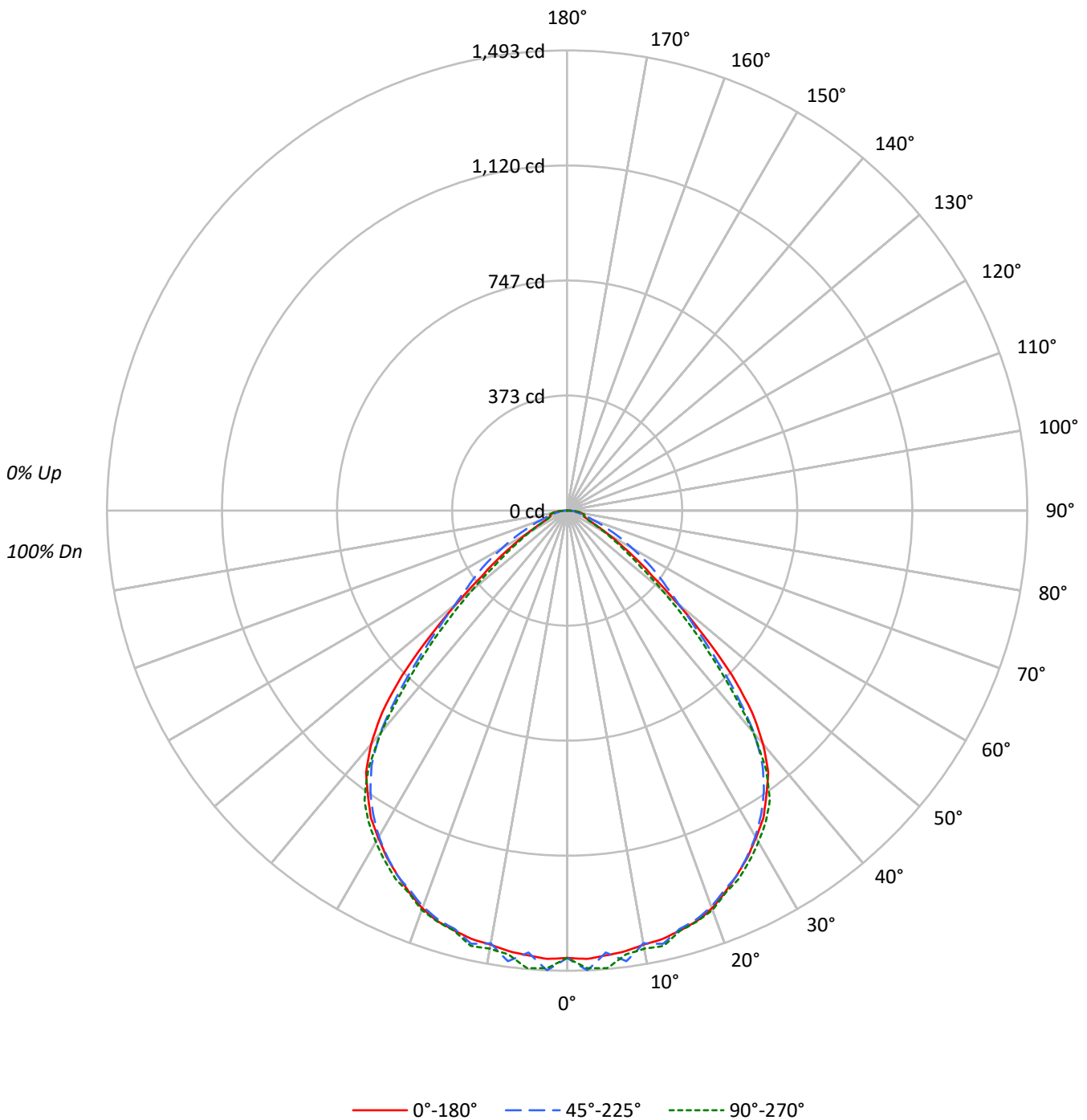
Input Watts (W): 25.296
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1953	1953	1953
5°	1957	1944	2013
10°	1954	1948	1972
15°	1965	1958	1966
20°	1967	1958	1975
25°	1936	1938	1957
30°	1904	1898	1929
35°	1850	1828	1883
40°	1738	1660	1651
45°	1440	1303	1236
50°	969	989	845
55°	639	829	554
60°	410	654	379
65°	264	500	257
70°	234	358	234
75°	302	284	304
80°	369	245	387
85°	429	364	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	4.7
10°-20°	399.0	13.6
20°-30°	600.7	20.5
30°-40°	696.2	23.7
40°-50°	543.9	18.5
50°-60°	290.4	9.9
60°-70°	149.3	5.1
70°-80°	84.5	2.9
80°-90°	32.1	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°	1138.6	38.8
0°-40°	1834.8	62.5
0°-60°	2669.1	90.9
0°-90°	2935.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2935.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1449	1490	1440	1479	1490	138
15°	1411	1420	1406	1415	1412	398
25°	1304	1300	1305	1303	1318	601
35°	1126	1121	1113	1135	1146	702
45°	757	758	685	679	650	570
55°	272	345	354	319	236	251
65°	83	173	157	172	81	91
75°	58	109	55	102	58	59
85°	28	36	24	36	29	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1451.3	1451.3	1451.3	1451.3	1451.3
2.5°	1456.0	1482.4	1492.8	1480.0	1485.7
5°	1448.9	1489.5	1439.5	1479.1	1490.4
7.5°	1442.3	1438.1	1474.4	1436.7	1452.7
10°	1430.1	1432.9	1425.8	1452.7	1443.3
12.5°	1424.4	1440.9	1439.5	1425.8	1446.6
15°	1410.7	1419.7	1406.0	1415.0	1411.7
17.5°	1397.1	1392.8	1391.4	1395.2	1398.5
20°	1373.5	1359.4	1367.8	1368.8	1379.2
22.5°	1339.6	1331.1	1333.0	1341.4	1342.4
25°	1304.2	1300.0	1305.2	1303.3	1317.9
27.5°	1267.4	1261.8	1265.1	1272.2	1281.1
30°	1225.5	1224.1	1221.7	1227.9	1241.5
32.5°	1184.0	1172.7	1170.8	1183.5	1199.1
35°	1126.5	1121.3	1112.8	1135.0	1146.3
37.5°	1071.8	1055.8	1042.1	1055.3	1060.1
40°	989.4	977.1	945.0	946.5	939.9
42.5°	888.0	879.1	817.8	806.9	788.6
45°	757.0	757.5	684.9	678.7	649.5
47.5°	604.7	631.6	568.4	561.4	518.0
50°	462.9	511.4	472.3	461.0	403.5
52.5°	347.4	418.6	406.3	381.8	302.6
55°	272.4	344.6	353.5	318.6	236.1
57.5°	205.0	283.8	298.4	269.6	182.4
60°	152.2	239.0	243.2	231.9	140.9
62.5°	113.1	203.1	197.5	198.9	104.6
65°	83.0	173.0	157.0	172.5	80.6
67.5°	67.9	149.9	122.1	149.4	65.5
70°	59.4	132.9	91.0	131.5	59.4
72.5°	57.5	122.1	72.1	116.9	58.0
75°	58.0	108.9	54.7	101.8	58.4
77.5°	53.3	89.6	41.5	86.7	55.6
80°	47.6	67.9	31.6	68.8	50.0
82.5°	40.5	49.5	25.5	50.9	41.9
85°	27.8	36.3	23.6	36.3	29.2
87.5°	13.2	21.7	14.6	20.7	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)