

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: P293918

Luminaire Tested: **24GR-LD5-30-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293918
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-LD5-30-A19/156-UNV-L83050-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: 2967.0 lumens
Efficiency: N/A
Efficacy: 148.4 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

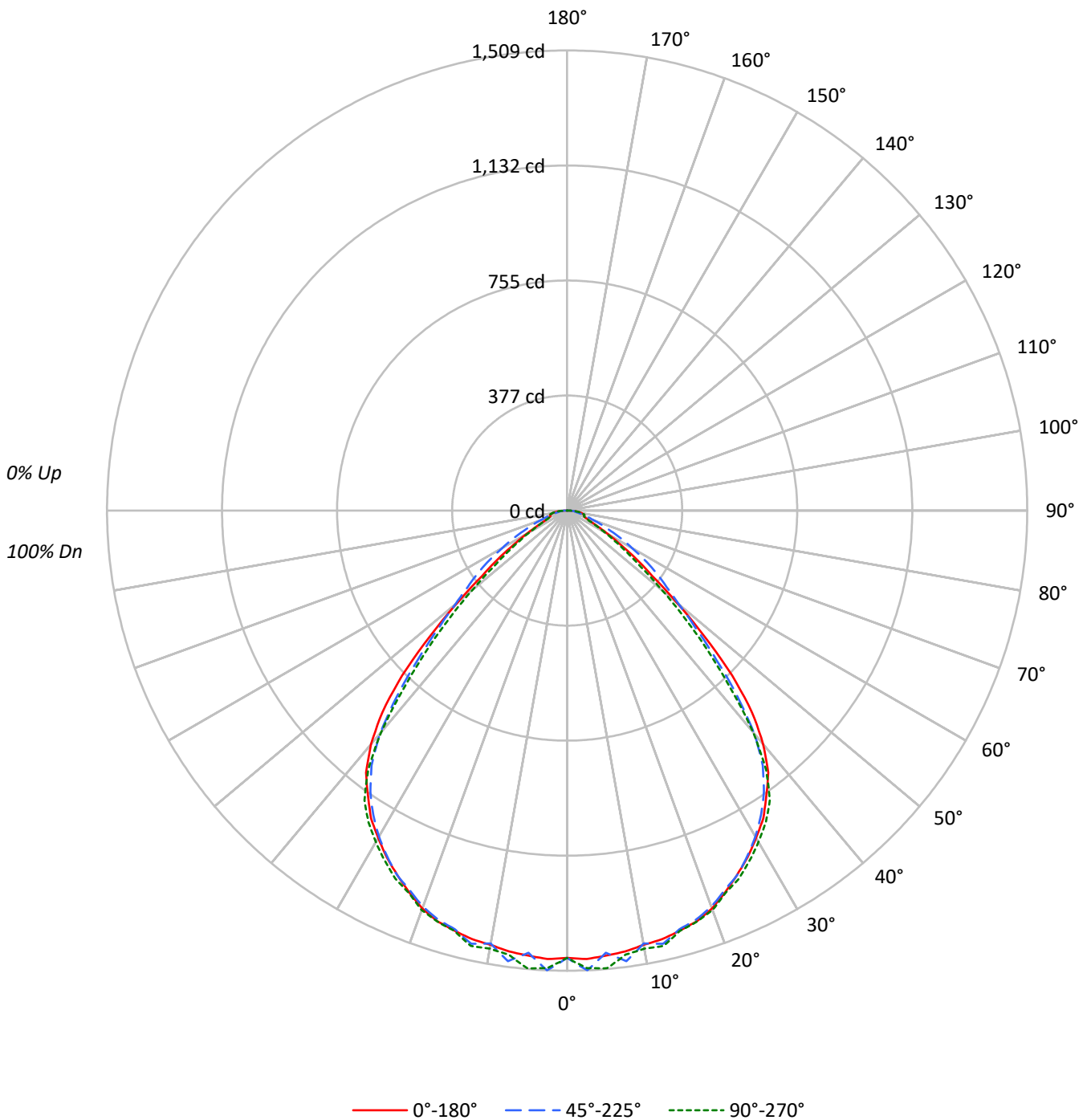
Input Watts (W): 19.995
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1974	1974	1974
5°	1978	1965	2035
10°	1975	1969	1993
15°	1986	1980	1988
20°	1988	1980	1996
25°	1957	1959	1978
30°	1925	1919	1950
35°	1871	1848	1903
40°	1757	1678	1669
45°	1456	1317	1249
50°	979	999	854
55°	646	838	560
60°	414	662	383
65°	267	505	259
70°	236	362	236
75°	305	287	307
80°	373	247	391
85°	434	367	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	4.7
10°-20°	403.3	13.6
20°-30°	607.2	20.5
30°-40°	703.8	23.7
40°-50°	549.8	18.5
50°-60°	293.6	9.9
60°-70°	151.0	5.1
70°-80°	85.4	2.9
80°-90°	32.4	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°	1151.0	38.8
0°-40°	1854.8	62.5
0°-60°	2698.2	90.9
0°-90°	2967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1465	1506	1455	1495	1507	139
15°	1426	1435	1421	1430	1427	403
25°	1318	1314	1319	1318	1332	608
35°	1139	1134	1125	1147	1159	710
45°	765	766	692	686	657	577
55°	275	348	357	322	239	254
65°	84	175	159	174	82	92
75°	59	110	55	103	59	59
85°	28	37	24	37	30	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.1	1467.1	1467.1	1467.1	1467.1
2.5°	1471.9	1498.5	1509.0	1496.2	1501.9
5°	1464.7	1505.7	1455.2	1495.2	1506.6
7.5°	1458.0	1453.8	1490.4	1452.3	1468.5
10°	1445.7	1448.5	1441.4	1468.5	1459.0
12.5°	1439.9	1456.6	1455.2	1441.4	1462.3
15°	1426.1	1435.2	1421.4	1430.4	1427.1
17.5°	1412.3	1408.0	1406.6	1410.4	1413.7
20°	1388.5	1374.2	1382.8	1383.7	1394.2
22.5°	1354.2	1345.6	1347.5	1356.1	1357.0
25°	1318.4	1314.1	1319.4	1317.5	1332.3
27.5°	1281.3	1275.5	1278.9	1286.0	1295.1
30°	1238.9	1237.4	1235.0	1241.2	1255.1
32.5°	1196.9	1185.5	1183.6	1196.5	1212.2
35°	1138.8	1133.6	1125.0	1147.4	1158.8
37.5°	1083.5	1067.3	1053.5	1066.8	1071.6
40°	1000.1	987.8	955.4	956.8	950.1
42.5°	897.7	888.6	826.7	815.7	797.2
45°	765.2	765.7	692.3	686.1	656.6
47.5°	611.3	638.5	574.6	567.5	523.7
50°	467.9	517.0	477.4	466.0	407.9
52.5°	351.2	423.1	410.7	386.0	305.9
55°	275.4	348.3	357.4	322.1	238.7
57.5°	207.3	286.8	301.6	272.5	184.4
60°	153.9	241.6	245.9	234.4	142.5
62.5°	114.4	205.4	199.6	201.1	105.8
65°	83.9	174.9	158.7	174.4	81.5
67.5°	68.6	151.5	123.4	151.0	66.2
70°	60.0	134.4	92.0	132.9	60.0
72.5°	58.1	123.4	72.9	118.2	58.6
75°	58.6	110.1	55.3	102.9	59.1
77.5°	53.8	90.5	41.9	87.7	56.2
80°	48.1	68.6	31.9	69.6	50.5
82.5°	41.0	50.0	25.7	51.5	42.4
85°	28.1	36.7	23.8	36.7	29.5
87.5°	13.3	21.9	14.8	21.0	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)