

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: P292640

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3124.0 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

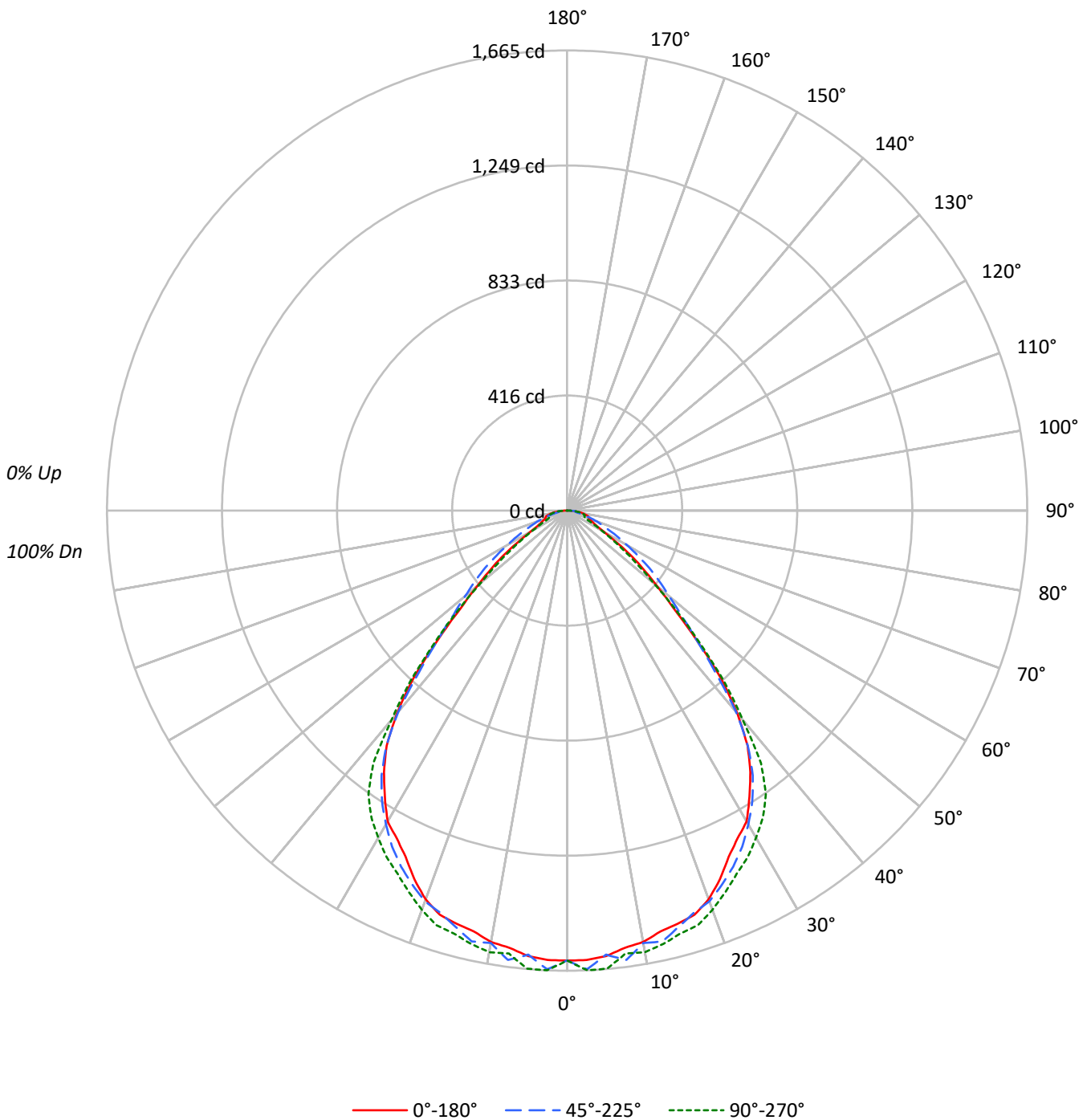
Input Watts (W): 33.108
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4381	4381	4381
5°	4370	4356	4494
10°	4330	4342	4433
15°	4310	4343	4413
20°	4287	4308	4401
25°	4104	4220	4308
30°	4037	4073	4247
35°	3796	3845	4118
40°	3364	3341	3472
45°	2512	2518	2588
50°	1769	2012	1713
55°	1305	1699	1171
60°	816	1343	765
65°	665	1064	534
70°	660	886	527
75°	819	651	681
80°	913	513	832
85°	908	954	932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	5.0
10°-20°	441.5	14.1
20°-30°	653.8	20.9
30°-40°	732.4	23.4
40°-50°	538.2	17.2
50°-60°	300.8	9.6
60°-70°	167.7	5.4
70°-80°	98.5	3.2
80°-90°	36.2	1.2
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°	1250.3	40.0
0°-40°	1982.7	63.5
0°-60°	2821.6	90.3
0°-90°	3124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1618	1648	1613	1646	1664	153
15°	1547	1557	1559	1582	1584	437
25°	1382	1393	1421	1441	1451	641
35°	1156	1156	1170	1223	1254	716
45°	660	714	662	709	680	516
55°	278	339	362	361	250	248
65°	104	186	167	214	84	108
75°	79	111	63	126	66	79
85°	29	43	31	40	30	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1627.4	1642.1	1661.3	1663.5	1664.9
5°	1617.8	1648.0	1612.7	1645.8	1663.5
7.5°	1595.8	1614.2	1639.9	1606.8	1616.4
10°	1584.7	1589.1	1589.1	1630.4	1622.3
12.5°	1559.7	1589.1	1596.5	1588.4	1606.1
15°	1547.2	1556.7	1559.0	1582.5	1584.0
17.5°	1533.2	1531.0	1525.8	1542.8	1572.9
20°	1497.1	1489.0	1504.5	1525.1	1536.9
22.5°	1444.1	1446.3	1464.7	1481.7	1494.9
25°	1382.3	1393.3	1421.3	1441.2	1450.8
27.5°	1335.9	1352.1	1371.3	1394.8	1414.0
30°	1299.1	1297.7	1310.9	1344.8	1366.8
32.5°	1227.7	1232.9	1246.9	1287.4	1318.3
35°	1155.6	1156.3	1170.3	1223.3	1253.5
37.5°	1072.4	1066.5	1074.6	1132.0	1151.9
40°	957.6	959.1	951.0	991.5	988.5
42.5°	823.6	835.4	793.5	846.5	842.8
45°	660.2	714.0	661.7	708.8	680.1
47.5°	521.1	600.6	557.2	591.8	538.1
50°	422.5	504.2	480.6	496.1	409.2
52.5°	346.7	412.9	420.3	424.0	319.4
55°	278.2	338.6	362.1	361.4	249.5
57.5°	205.4	275.3	302.5	313.6	189.2
60°	151.6	228.9	249.5	273.8	142.1
62.5°	122.2	200.9	206.1	240.0	108.2
65°	104.5	185.5	167.1	214.2	83.9
67.5°	92.7	173.0	136.2	191.4	71.4
70°	83.9	153.8	112.6	171.5	67.0
72.5°	81.7	131.0	86.9	153.1	66.2
75°	78.8	111.1	62.6	125.9	65.5
77.5°	67.7	95.0	44.9	97.2	61.1
80°	58.9	75.8	33.1	72.9	53.7
82.5°	45.6	57.4	29.4	55.2	43.4
85°	29.4	43.4	30.9	39.7	30.2
87.5°	14.0	24.3	22.1	21.3	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)