

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: P292631

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292631
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-LD5-32-A19/156-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2698.0 lumens
Efficiency: N/A
Efficacy: 107.8 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

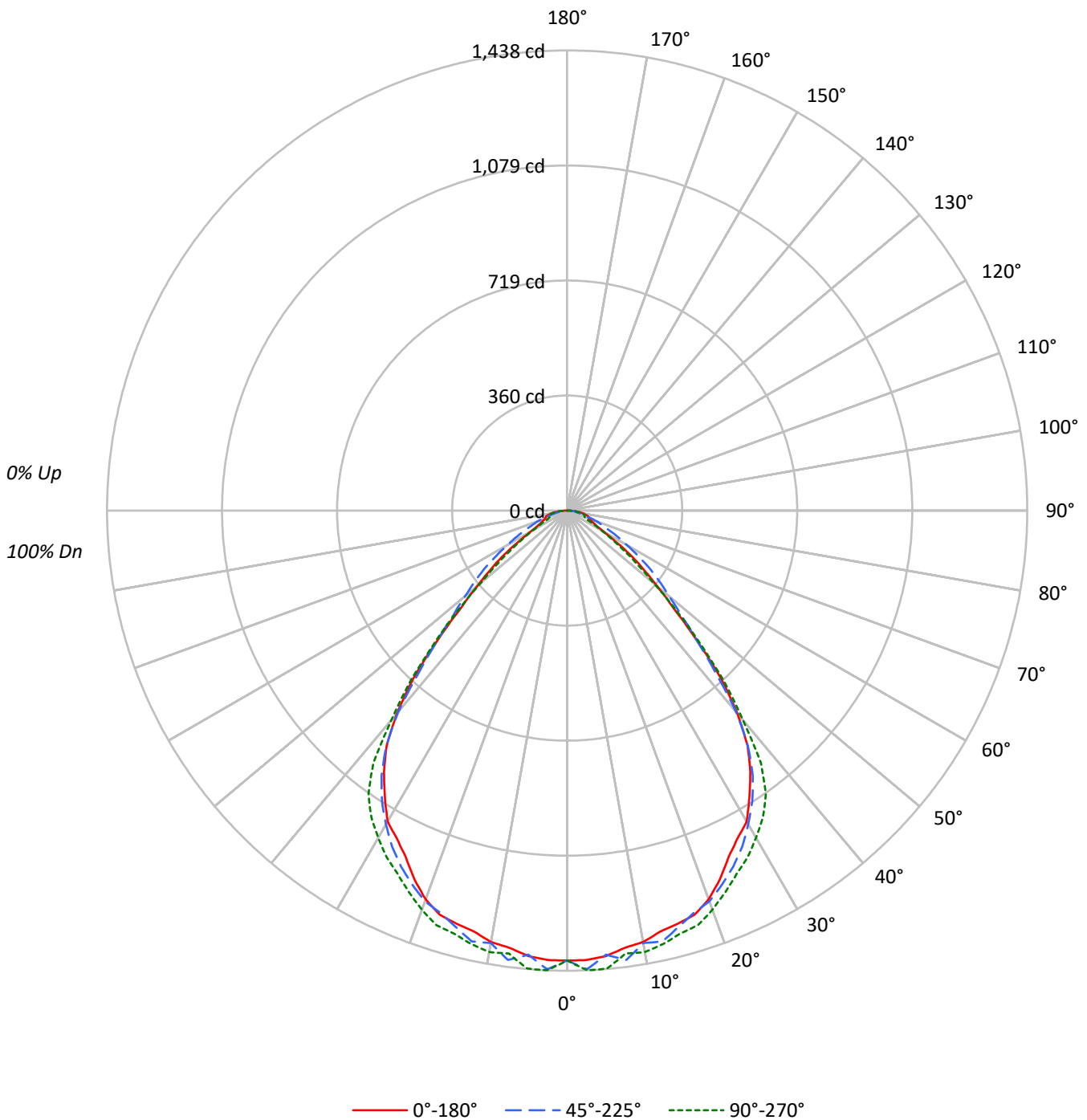
Input Watts (W): 25.017
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3784	3784	3784
5°	3774	3762	3881
10°	3740	3750	3828
15°	3723	3751	3811
20°	3703	3721	3801
25°	3545	3645	3720
30°	3486	3518	3668
35°	3279	3320	3556
40°	2905	2885	2999
45°	2170	2175	2235
50°	1528	1738	1479
55°	1127	1468	1011
60°	704	1160	660
65°	575	919	462
70°	570	766	455
75°	707	561	588
80°	789	443	719
85°	784	824	806



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	5.0
10°-20°	381.3	14.1
20°-30°	564.7	20.9
30°-40°	632.5	23.4
40°-50°	464.8	17.2
50°-60°	259.8	9.6
60°-70°	144.8	5.4
70°-80°	85.1	3.2
80°-90°	31.3	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°	1079.8	40.0
0°-40°	1712.3	63.5
0°-60°	2436.9	90.3
0°-90°	2698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1397	1423	1393	1421	1437	132
15°	1336	1344	1346	1367	1368	377
25°	1194	1203	1228	1245	1253	553
35°	998	999	1011	1056	1083	618
45°	570	617	572	612	587	445
55°	240	292	313	312	216	214
65°	90	160	144	185	72	93
75°	68	96	54	109	57	68
85°	25	38	27	34	26	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1406.1	1406.1	1406.1	1406.1	1406.1
2.5°	1405.5	1418.2	1434.7	1436.6	1437.9
5°	1397.2	1423.3	1392.8	1421.4	1436.6
7.5°	1378.2	1394.0	1416.3	1387.7	1396.0
10°	1368.6	1372.4	1372.4	1408.0	1401.0
12.5°	1347.0	1372.4	1378.8	1371.8	1387.1
15°	1336.2	1344.5	1346.4	1366.7	1368.0
17.5°	1324.1	1322.2	1317.8	1332.4	1358.4
20°	1293.0	1286.0	1299.3	1317.1	1327.3
22.5°	1247.2	1249.1	1265.0	1279.6	1291.1
25°	1193.8	1203.3	1227.5	1244.7	1252.9
27.5°	1153.8	1167.7	1184.3	1204.6	1221.1
30°	1122.0	1120.7	1132.1	1161.4	1180.5
32.5°	1060.3	1064.8	1076.8	1111.8	1138.5
35°	998.0	998.7	1010.7	1056.5	1082.6
37.5°	926.2	921.1	928.1	977.7	994.8
40°	827.0	828.3	821.3	856.3	853.7
42.5°	711.3	721.5	685.3	731.0	727.9
45°	570.2	616.6	571.5	612.2	587.4
47.5°	450.1	518.7	481.2	511.1	464.7
50°	364.9	435.4	415.1	428.4	353.4
52.5°	299.4	356.6	363.0	366.2	275.9
55°	240.3	292.4	312.8	312.1	215.5
57.5°	177.4	237.7	261.3	270.8	163.4
60°	130.9	197.7	215.5	236.5	122.7
62.5°	105.5	173.5	178.0	207.2	93.4
65°	90.3	160.2	144.3	185.0	72.5
67.5°	80.1	149.4	117.6	165.3	61.7
70°	72.5	132.9	97.3	148.1	57.8
72.5°	70.6	113.2	75.0	132.2	57.2
75°	68.0	96.0	54.0	108.7	56.6
77.5°	58.5	82.0	38.8	83.9	52.8
80°	50.9	65.5	28.6	62.9	46.4
82.5°	39.4	49.6	25.4	47.7	37.5
85°	25.4	37.5	26.7	34.3	26.1
87.5°	12.1	21.0	19.1	18.4	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)