

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: P275608

Luminaire Tested: **14CZ2-39-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3568.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

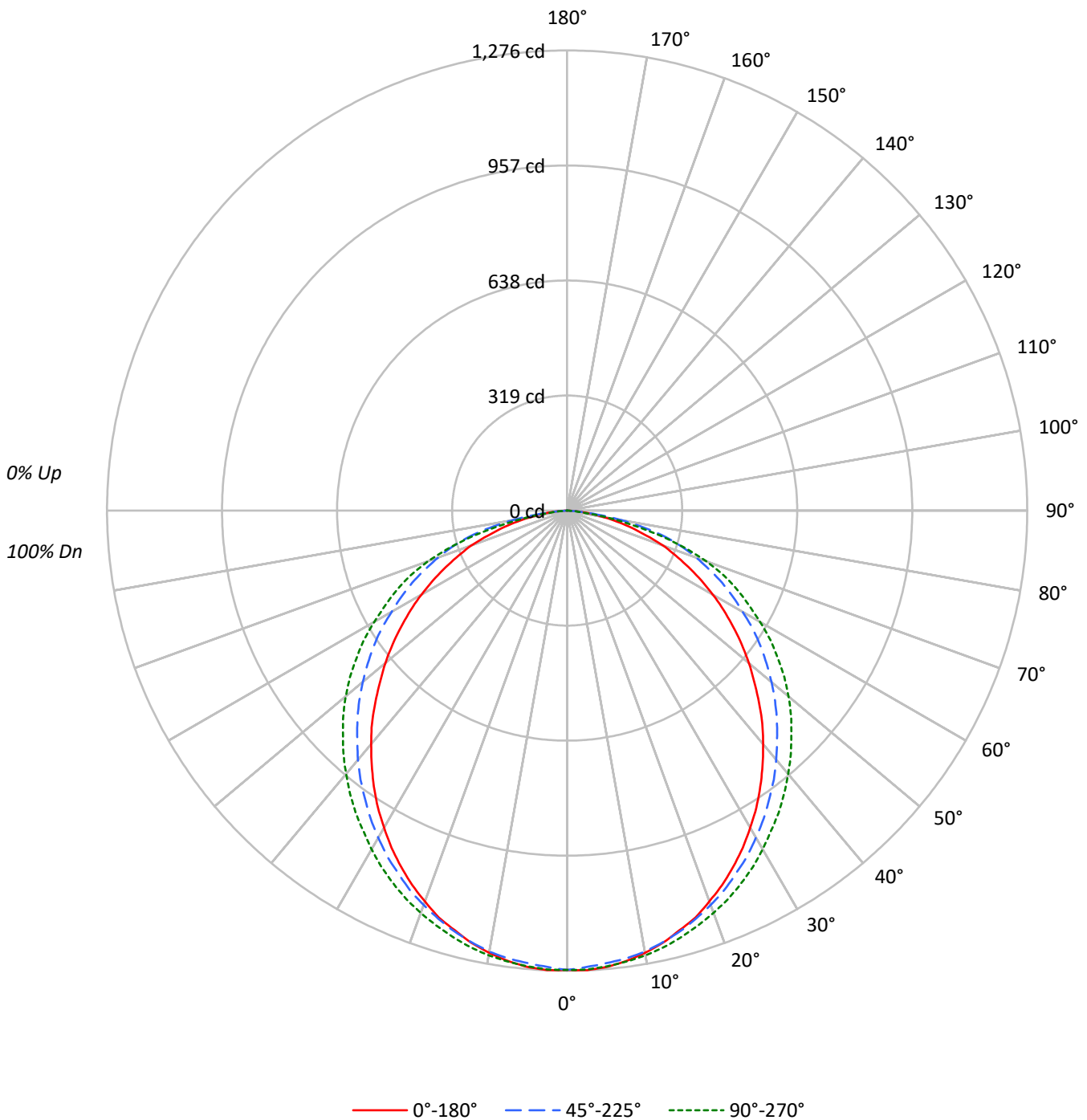
Input Watts (W): 31.806
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3427	3427	3427
5°	3431	3403	3426
10°	3403	3393	3422
15°	3356	3366	3411
20°	3303	3333	3399
25°	3236	3293	3388
30°	3155	3254	3370
35°	3069	3208	3359
40°	2970	3169	3349
45°	2861	3131	3346
50°	2755	3096	3355
55°	2639	3071	3345
60°	2513	3028	3323
65°	2365	3019	3323
70°	2227	2992	3229
75°	1932	2925	2759
80°	1562	2357	1836
85°	1037	818	546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.4
10°-20°	342.3	9.6
20°-30°	513.4	14.4
30°-40°	612.4	17.2
40°-50°	633.1	17.7
50°-60°	578.0	16.2
60°-70°	454.9	12.7
70°-80°	264.8	7.4
80°-90°	48.8	1.4
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°	975.9	27.4
0°-40°	1588.3	44.5
0°-60°	2799.5	78.5
0°-90°	3568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1270	1267	1260	1270	1268	120
15°	1205	1206	1208	1224	1224	340
25°	1090	1095	1109	1136	1141	502
35°	934	946	976	1014	1022	584
45°	752	777	823	869	879	581
55°	563	593	654	702	713	503
65°	372	410	474	511	522	369
75°	186	230	281	276	265	197
85°	34	48	26	21	18	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.7	1273.7	1273.7	1273.7	1273.7
2.5°	1275.5	1271.9	1266.6	1275.5	1273.7
5°	1270.2	1266.6	1259.6	1270.2	1268.4
7.5°	1259.6	1256.0	1252.5	1263.1	1261.3
10°	1245.4	1243.6	1241.9	1254.3	1252.5
12.5°	1227.7	1227.7	1226.0	1240.1	1240.1
15°	1204.7	1206.5	1208.3	1224.2	1224.2
17.5°	1183.5	1181.7	1187.0	1204.7	1206.5
20°	1153.4	1157.0	1164.0	1185.3	1187.0
22.5°	1123.3	1126.9	1139.3	1160.5	1165.8
25°	1089.7	1095.0	1109.2	1135.7	1141.0
27.5°	1054.4	1061.4	1080.9	1109.2	1114.5
30°	1015.4	1026.0	1047.3	1079.1	1084.4
32.5°	976.5	987.1	1013.7	1045.5	1052.6
35°	934.1	946.4	976.5	1013.7	1022.5
37.5°	889.8	905.8	941.1	978.3	988.9
40°	845.6	863.3	902.2	941.1	953.5
42.5°	801.4	819.1	861.5	905.8	918.1
45°	751.8	776.6	822.6	868.6	879.2
47.5°	704.1	730.6	781.9	827.9	842.1
50°	658.1	684.6	739.5	787.2	801.4
52.5°	610.3	638.6	697.0	746.5	758.9
55°	562.6	592.6	654.5	702.3	712.9
57.5°	514.8	546.6	610.3	656.3	668.7
60°	467.0	500.6	562.6	608.6	617.4
62.5°	419.3	454.6	518.3	559.0	567.9
65°	371.5	410.4	474.1	511.3	521.9
67.5°	325.5	364.4	426.3	461.7	470.6
70°	283.0	318.4	380.3	406.9	410.4
72.5°	230.0	274.2	334.4	348.5	339.7
75°	185.8	230.0	281.3	276.0	265.4
77.5°	141.5	185.8	219.4	201.7	187.5
80°	100.8	145.1	152.1	125.6	118.5
82.5°	65.5	100.8	84.9	65.5	53.1
85°	33.6	47.8	26.5	21.2	17.7
87.5°	10.6	7.1	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)