

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: P277336

Luminaire Tested: **22CZ2-34HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277336
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3377.0 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

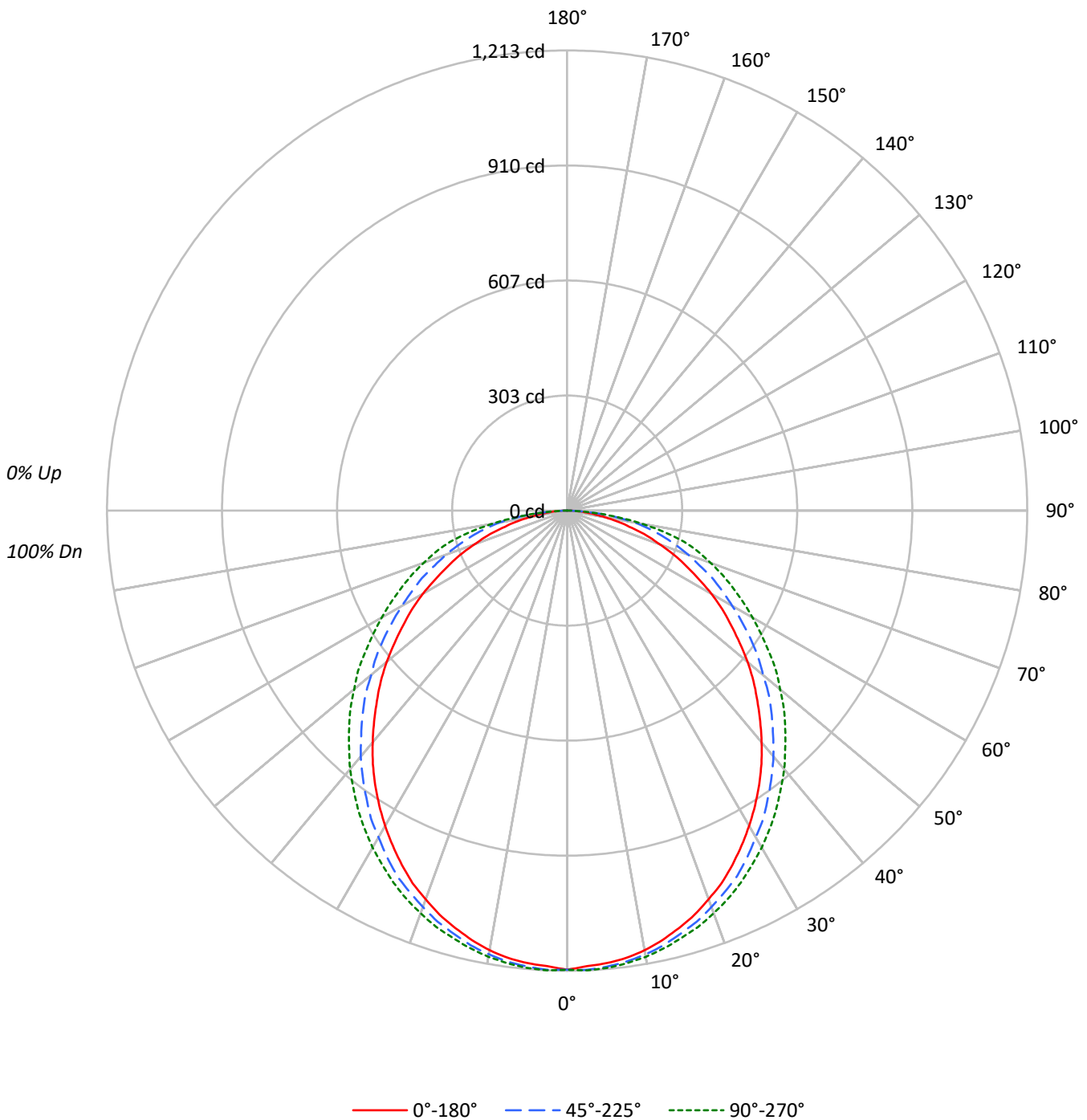
Input Watts (W): 25.668
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3256	3256	3256
5°	3235	3260	3269
10°	3216	3246	3263
15°	3174	3217	3248
20°	3122	3186	3235
25°	3060	3153	3214
30°	2982	3089	3187
35°	2899	3033	3157
40°	2801	2972	3127
45°	2698	2902	3094
50°	2599	2823	3067
55°	2476	2772	3046
60°	2366	2705	3036
65°	2207	2689	3070
70°	2033	2666	3161
75°	1835	2703	3326
80°	1587	2783	3126
85°	1312	2334	2334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.4
10°-20°	325.7	9.6
20°-30°	487.3	14.4
30°-40°	577.1	17.1
40°-50°	588.1	17.4
50°-60°	527.1	15.6
60°-70°	412.7	12.2
70°-80°	266.1	7.9
80°-90°	78.6	2.3
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°	927.4	27.5
0°-40°	1504.4	44.5
0°-60°	2619.6	77.6
0°-90°	3377.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3377.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1198	1201	1207	1208	1210	114
15°	1139	1146	1155	1164	1166	321
25°	1030	1040	1062	1076	1082	474
35°	882	893	923	952	961	551
45°	709	725	763	802	813	548
55°	528	545	591	632	649	473
65°	347	367	422	463	482	344
75°	176	203	260	304	320	189
85°	42	58	76	76	76	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1210.1	1210.1	1210.1	1210.1	1210.1
2.5°	1202.2	1205.4	1211.7	1213.2	1213.2
5°	1197.5	1200.6	1206.9	1208.5	1210.1
7.5°	1189.6	1191.2	1199.1	1202.2	1203.8
10°	1177.0	1180.1	1188.0	1192.8	1194.3
12.5°	1159.7	1164.4	1173.8	1180.1	1181.7
15°	1139.2	1145.5	1154.9	1164.4	1166.0
17.5°	1117.1	1123.4	1136.0	1147.1	1150.2
20°	1090.3	1098.2	1112.4	1125.0	1129.7
22.5°	1063.6	1069.9	1087.2	1102.9	1107.7
25°	1030.5	1039.9	1062.0	1076.2	1082.5
27.5°	995.8	1006.8	1028.9	1047.8	1054.1
30°	959.6	970.6	994.2	1017.9	1025.7
32.5°	921.7	934.3	962.7	986.3	994.2
35°	882.4	893.4	923.3	951.7	961.1
37.5°	841.4	850.8	885.5	915.4	924.9
40°	797.3	809.9	846.1	880.8	890.2
42.5°	753.2	767.3	803.6	841.4	850.8
45°	709.0	724.8	762.6	802.0	813.0
47.5°	666.5	679.1	721.6	759.5	775.2
50°	620.8	633.4	674.4	716.9	732.7
52.5°	573.5	590.9	635.0	675.9	694.9
55°	527.8	545.2	590.9	631.8	649.2
57.5°	485.3	499.5	546.7	589.3	606.6
60°	439.6	452.2	502.6	548.3	564.1
62.5°	390.8	409.7	461.7	504.2	523.1
65°	346.6	367.1	422.3	463.2	482.1
67.5°	305.7	324.6	378.2	422.3	442.8
70°	258.4	283.6	338.8	382.9	401.8
72.5°	220.6	242.6	299.4	343.5	364.0
75°	176.5	203.3	260.0	304.1	319.9
77.5°	140.2	167.0	220.6	255.3	263.1
80°	102.4	129.2	179.6	197.0	201.7
82.5°	69.3	94.5	129.2	133.9	135.5
85°	42.5	58.3	75.6	75.6	75.6
87.5°	20.5	23.6	26.8	25.2	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)