

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: P277172

Luminaire Tested: **22CZ2-39HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3468.0 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

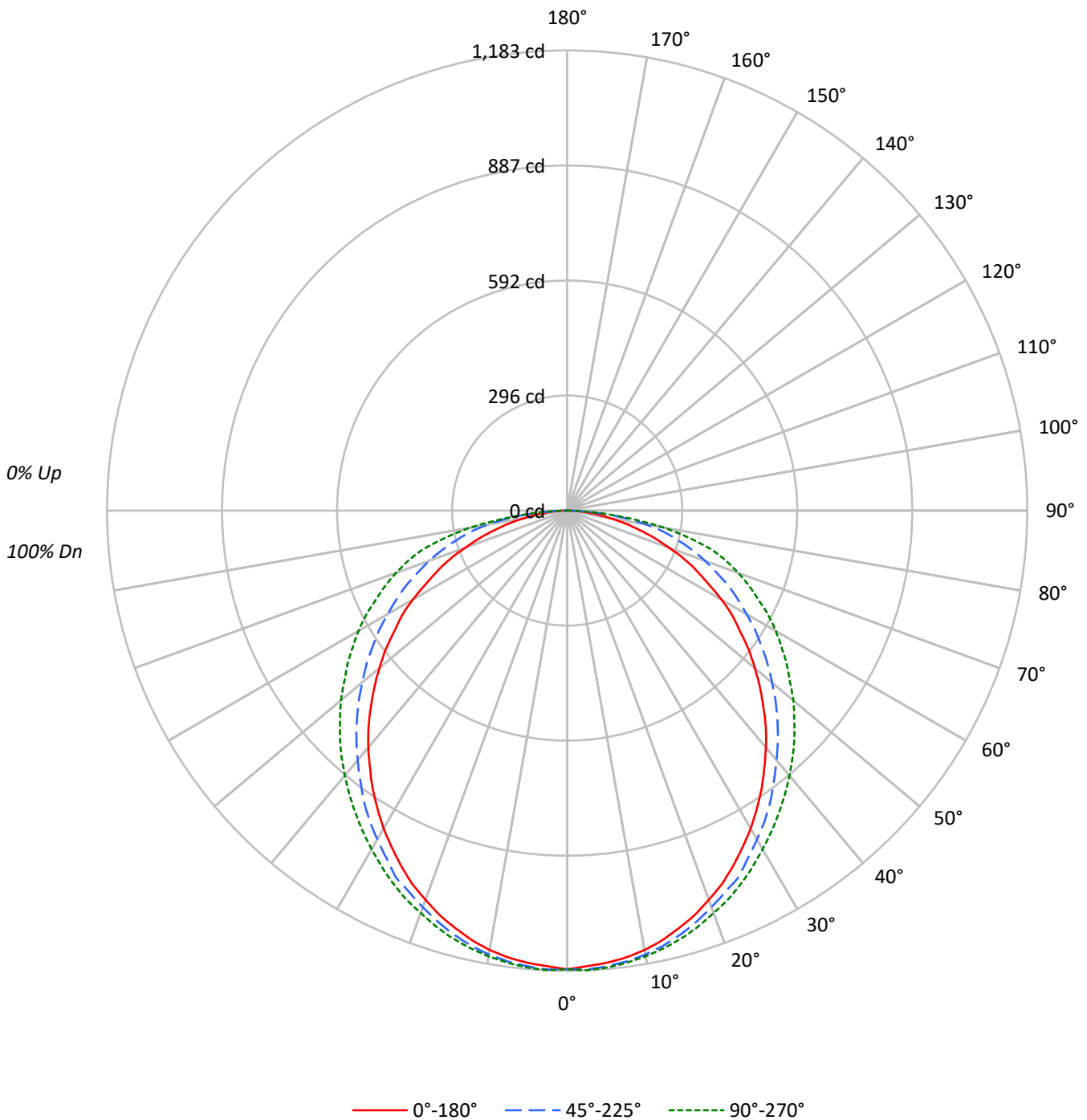
Input Watts (W): 30.039
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3173	3173	3173
5°	3153	3176	3185
10°	3134	3166	3180
15°	3095	3143	3171
20°	3049	3108	3152
25°	2994	3091	3141
30°	2932	3033	3123
35°	2865	2994	3117
40°	2793	2943	3123
45°	2715	2909	3143
50°	2636	2879	3179
55°	2546	2866	3234
60°	2470	2865	3334
65°	2347	2912	3456
70°	2189	2967	3679
75°	2005	3069	3975
80°	1745	3200	3914
85°	1528	2847	3109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.5	3.2
10°-20°	317.6	9.2
20°-30°	476.8	13.7
30°-40°	569.8	16.4
40°-50°	592.5	17.1
50°-60°	549.1	15.8
60°-70°	450.4	13.0
70°-80°	304.5	8.8
80°-90°	95.7	2.8
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°	906.0	26.1
0°-40°	1475.8	42.6
0°-60°	2617.4	75.5
0°-90°	3468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1167	1169	1176	1178	1179	111
15°	1111	1116	1128	1135	1138	313
25°	1008	1017	1041	1053	1058	464
35°	872	884	911	939	949	545
45°	713	727	764	809	826	551
55°	543	560	611	666	689	488
65°	369	389	457	517	543	364
75°	193	225	295	355	382	204
85°	50	68	92	102	101	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.2	1179.2	1179.2	1179.2	1179.2
2.5°	1172.4	1175.8	1180.9	1182.6	1182.6
5°	1167.2	1168.9	1175.8	1177.5	1179.2
7.5°	1158.7	1162.1	1168.9	1170.7	1172.4
10°	1146.8	1150.2	1158.7	1162.1	1163.8
12.5°	1131.4	1134.8	1145.1	1150.2	1151.9
15°	1110.9	1116.0	1128.0	1134.8	1138.2
17.5°	1090.4	1095.6	1107.5	1117.8	1121.2
20°	1064.8	1076.8	1085.3	1099.0	1100.7
22.5°	1039.3	1046.1	1061.4	1075.1	1081.9
25°	1008.5	1017.1	1041.0	1052.9	1058.0
27.5°	976.1	988.1	1006.8	1025.6	1032.4
30°	943.7	952.2	976.1	998.3	1005.1
32.5°	907.9	919.8	945.4	967.6	977.8
35°	872.0	884.0	911.3	938.6	948.8
37.5°	832.8	846.4	873.7	906.1	919.8
40°	795.2	805.5	837.9	877.1	889.1
42.5°	756.0	767.9	802.0	844.7	858.4
45°	713.3	727.0	764.5	808.9	825.9
47.5°	672.4	686.0	727.0	771.3	791.8
50°	629.7	646.8	687.7	738.9	759.4
52.5°	588.7	604.1	650.2	703.1	721.8
55°	542.7	559.7	610.9	665.5	689.4
57.5°	505.1	517.1	573.4	629.7	653.6
60°	459.0	474.4	532.4	592.2	619.5
62.5°	409.6	435.2	494.9	556.3	583.6
65°	368.6	389.1	457.3	517.1	542.7
67.5°	325.9	348.1	414.7	477.8	506.8
70°	278.2	307.2	377.1	440.3	467.6
72.5°	235.5	266.2	337.9	399.3	428.3
75°	192.8	225.3	295.2	354.9	382.3
77.5°	151.9	187.7	256.0	302.0	319.1
80°	112.6	146.8	206.5	238.9	252.6
82.5°	78.5	107.5	151.9	168.9	172.4
85°	49.5	68.3	92.2	102.4	100.7
87.5°	22.2	27.3	34.1	37.5	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)