

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: P259223

Luminaire Tested: **22CZ-LD5-34-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259223
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-34-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3247.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

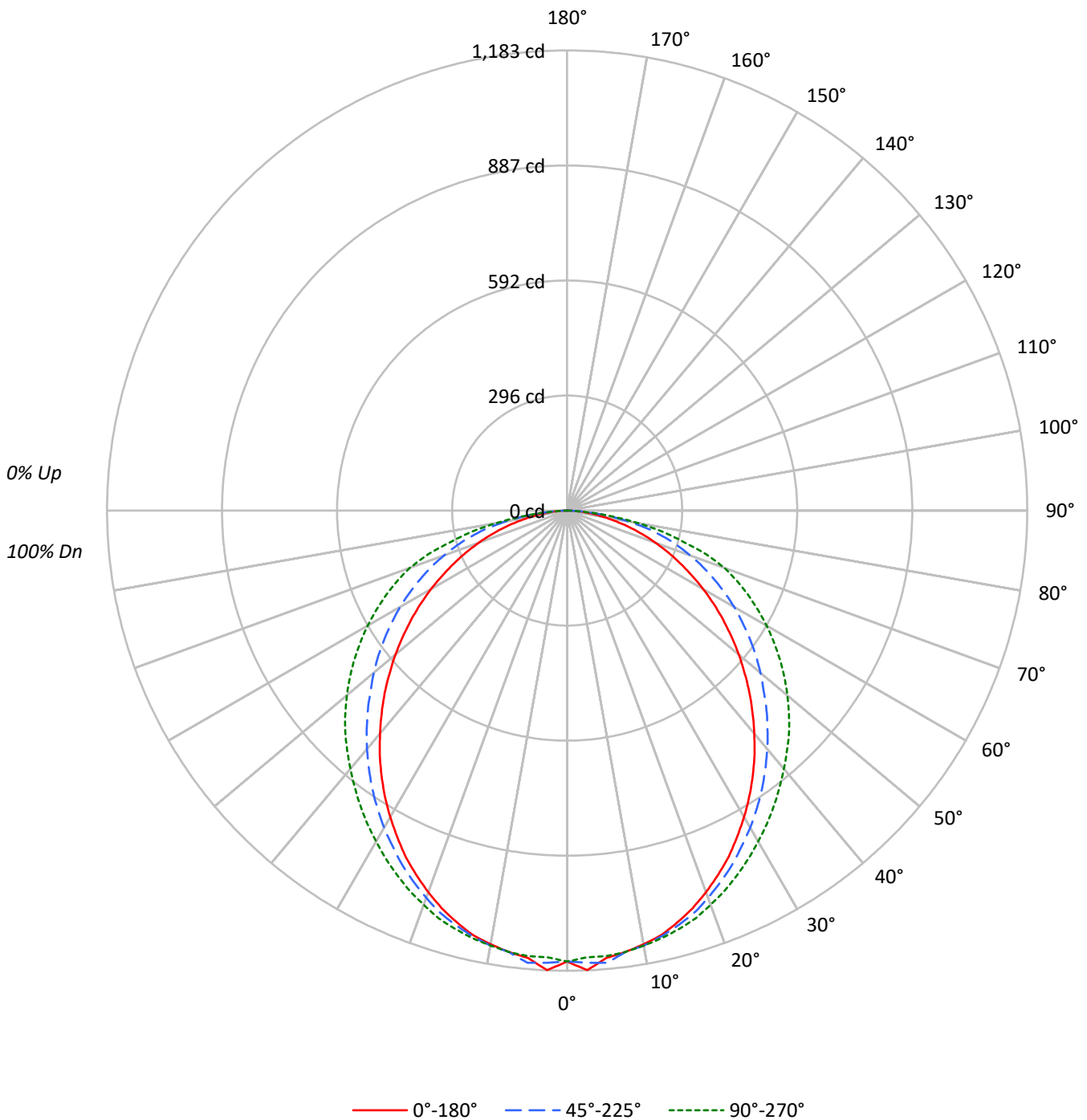
Input Watts (W): 25.575
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	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	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3119	3119	3119
5°	3118	3152	3105
10°	3093	3102	3102
15°	3053	3075	3101
20°	2989	3034	3088
25°	2916	2982	3071
30°	2826	2924	3052
35°	2734	2869	3045
40°	2629	2812	3045
45°	2524	2758	3071
50°	2413	2717	3094
55°	2297	2689	3134
60°	2175	2668	3187
65°	2041	2654	3268
70°	1901	2646	3379
75°	1724	2643	3201
80°	1492	2447	2839
85°	1269	1853	1803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.4
10°-20°	311.4	9.6
20°-30°	463.2	14.3
30°-40°	547.8	16.9
40°-50°	563.1	17.3
50°-60°	514.5	15.8
60°-70°	411.6	12.7
70°-80°	258.3	8.0
80°-90°	67.3	2.1
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°	884.5	27.2
0°-40°	1432.3	44.1
0°-60°	2509.8	77.3
0°-90°	3247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3247.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1154	1154	1167	1159	1150	110
15°	1096	1097	1104	1110	1113	309
25°	982	988	1004	1022	1034	452
35°	832	843	873	906	927	520
45°	663	680	725	778	807	511
55°	490	513	573	636	668	438
65°	320	349	417	480	513	318
75°	166	197	254	292	308	176
85°	41	52	60	58	58	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159.0	1159.0	1159.0	1159.0	1159.0
2.5°	1182.6	1177.9	1163.7	1154.2	1149.5
5°	1154.2	1154.2	1166.9	1159.0	1149.5
7.5°	1144.8	1144.8	1144.8	1168.4	1144.8
10°	1132.1	1133.7	1135.3	1144.8	1135.3
12.5°	1117.9	1117.9	1121.1	1124.2	1125.8
15°	1095.8	1097.4	1103.7	1110.0	1113.2
17.5°	1072.1	1076.9	1084.8	1092.6	1099.0
20°	1043.7	1050.0	1059.5	1072.1	1078.4
22.5°	1013.7	1020.0	1032.6	1046.9	1057.9
25°	982.1	988.4	1004.2	1021.6	1034.2
27.5°	945.8	953.7	972.6	996.3	1009.0
30°	909.5	919.0	941.1	967.9	982.1
32.5°	871.6	882.6	907.9	937.9	955.3
35°	832.1	843.2	873.2	906.3	926.9
37.5°	791.1	803.7	836.9	874.7	896.9
40°	748.4	762.6	800.5	841.6	866.9
42.5°	705.8	721.6	762.6	811.6	836.9
45°	663.2	680.5	724.7	778.4	806.9
47.5°	619.0	639.5	685.3	745.3	773.7
50°	576.3	596.9	649.0	710.5	739.0
52.5°	532.1	555.8	611.1	674.2	704.2
55°	489.5	513.2	573.2	636.3	667.9
57.5°	446.8	470.5	533.7	598.4	630.0
60°	404.2	429.5	495.8	559.0	592.1
62.5°	361.6	388.4	456.3	521.1	552.6
65°	320.5	349.0	416.8	480.0	513.2
67.5°	281.1	311.1	377.4	439.0	472.1
70°	241.6	271.6	336.3	396.3	429.5
72.5°	203.7	233.7	296.8	350.5	375.8
75°	165.8	197.4	254.2	292.1	307.9
77.5°	129.5	161.1	210.0	235.3	252.6
80°	96.3	123.2	157.9	176.8	183.2
82.5°	66.3	88.4	110.5	115.3	118.4
85°	41.1	52.1	60.0	58.4	58.4
87.5°	18.9	20.5	17.4	12.6	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)