

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: P277510

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277510
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-RDP-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2579.0 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

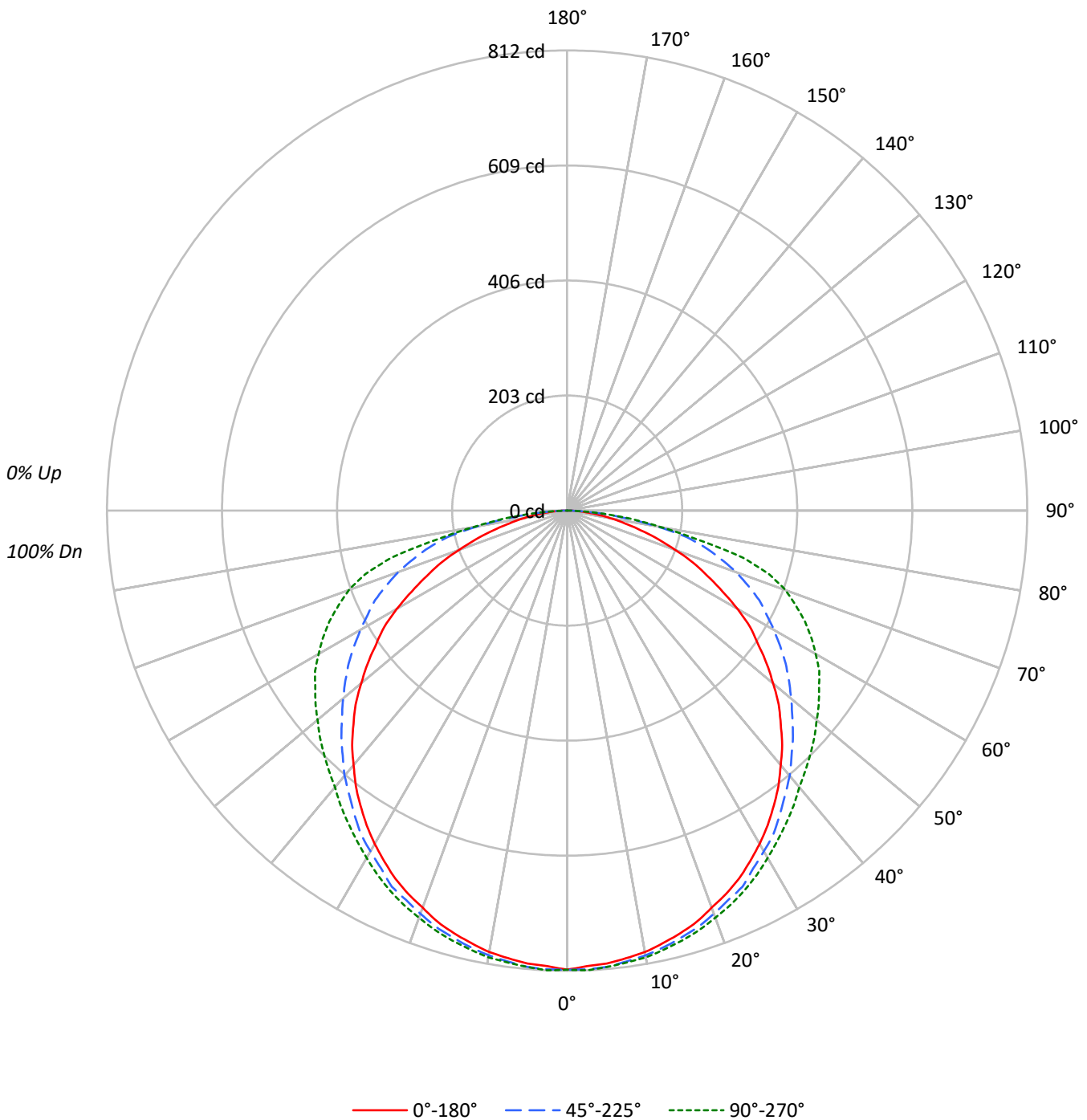
Input Watts (W): 30.783
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2180	2180	2180
5°	2168	2183	2183
10°	2162	2177	2188
15°	2151	2172	2188
20°	2135	2168	2190
25°	2129	2174	2197
30°	2110	2158	2199
35°	2088	2150	2213
40°	2059	2146	2239
45°	2029	2144	2310
50°	1986	2160	2407
55°	1932	2207	2546
60°	1869	2267	2726
65°	1740	2380	2947
70°	1597	2493	3224
75°	1400	2623	3333
80°	1206	2500	2617
85°	1053	1815	1991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	3.0
10°-20°	220.0	8.5
20°-30°	335.7	13.0
30°-40°	409.9	15.9
40°-50°	438.3	17.0
50°-60°	423.0	16.4
60°-70°	364.1	14.1
70°-80°	246.4	9.6
80°-90°	65.0	2.5
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°	632.3	24.5
0°-40°	1042.2	40.4
0°-60°	1903.5	73.8
0°-90°	2579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2579.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	802	804	808	808	808	76
15°	772	774	780	784	785	218
25°	717	721	732	736	740	330
35°	636	641	654	668	674	398
45°	533	543	564	592	607	412
55°	412	425	470	518	543	369
65°	273	300	374	433	463	272
75°	135	178	252	304	321	145
85°	34	47	59	61	64	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	810.1	810.1	810.1	810.1	810.1
2.5°	804.4	806.3	810.1	810.1	812.0
5°	802.5	804.4	808.2	808.2	808.2
7.5°	796.8	798.7	802.5	804.4	804.4
10°	791.1	793.0	796.8	798.7	800.6
12.5°	781.7	783.5	789.2	793.0	793.0
15°	772.2	774.1	779.8	783.5	785.4
17.5°	760.8	764.6	770.3	774.1	776.0
20°	745.6	749.4	757.0	762.7	764.6
22.5°	732.3	736.1	743.7	749.4	753.2
25°	717.1	720.9	732.3	736.1	739.9
27.5°	698.2	702.0	711.5	719.0	724.7
30°	679.2	683.0	694.4	703.9	707.7
32.5°	658.3	664.0	677.3	684.9	690.6
35°	635.6	641.3	654.5	667.8	673.5
37.5°	612.8	618.5	631.8	648.8	656.4
40°	586.2	593.8	610.9	633.7	637.5
42.5°	561.6	571.1	586.2	612.8	622.3
45°	533.1	542.6	563.5	591.9	607.1
47.5°	506.6	516.0	538.8	573.0	591.9
50°	474.3	487.6	516.0	555.9	574.9
52.5°	443.9	455.3	493.3	536.9	559.7
55°	411.7	425.0	470.5	517.9	542.6
57.5°	383.2	394.6	445.8	499.0	527.4
60°	347.2	362.4	421.2	478.1	506.6
62.5°	309.2	332.0	396.5	455.3	485.7
65°	273.2	299.8	373.8	432.6	462.9
67.5°	240.9	269.4	345.3	407.9	436.4
70°	203.0	239.0	316.8	377.5	409.8
72.5°	168.9	208.7	284.6	345.3	373.8
75°	134.7	178.3	252.3	303.6	320.6
77.5°	104.3	146.1	216.3	231.5	233.4
80°	77.8	115.7	161.3	163.2	168.9
82.5°	53.1	81.6	104.3	113.8	115.7
85°	34.1	47.4	58.8	60.7	64.5
87.5°	15.2	17.1	20.9	19.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)