

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: P387870

Luminaire Tested: **22CZ2-34HE-SQR-UNV-L940-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P387870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2710.3 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

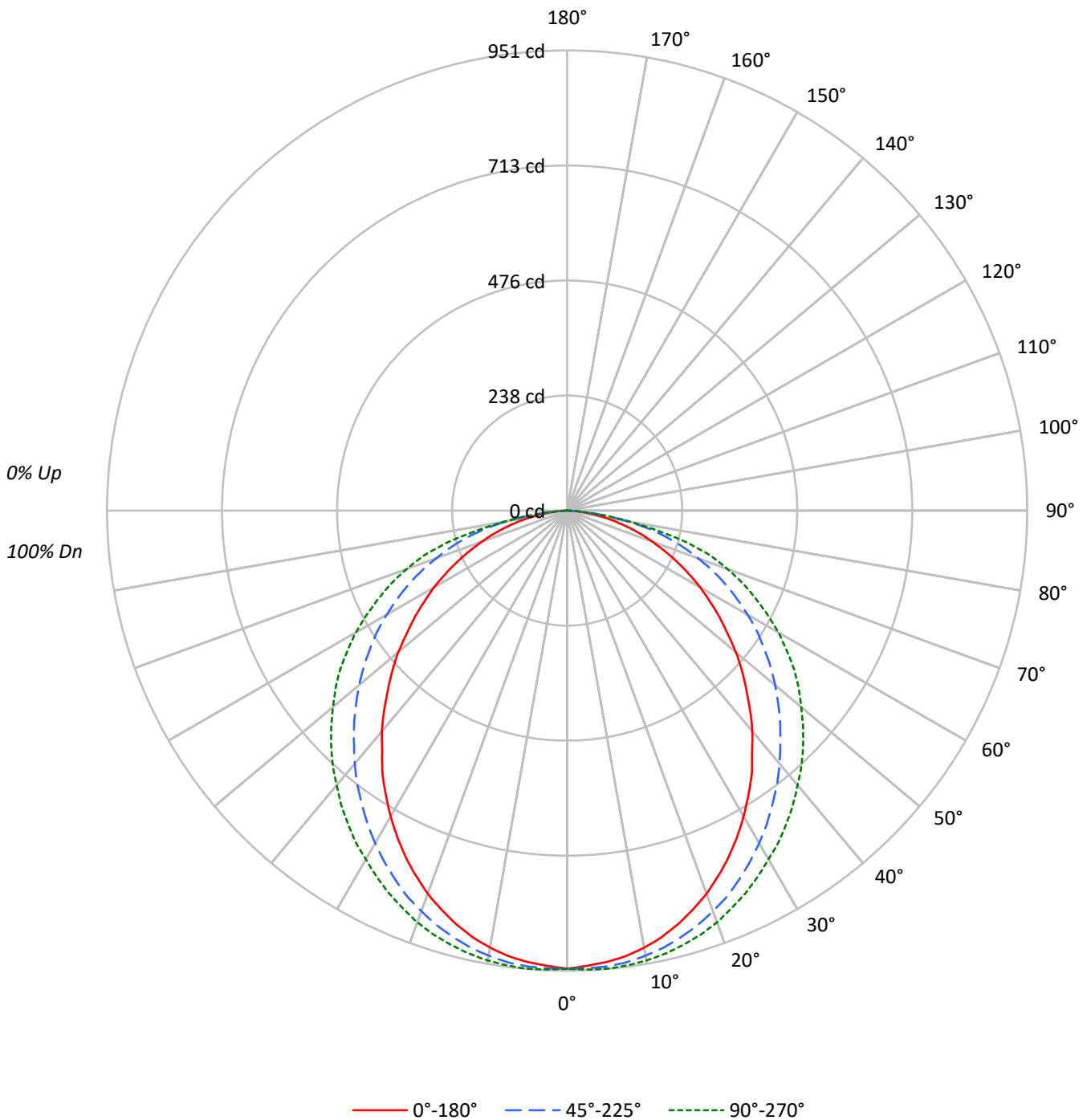
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2548	2548	2548
5°	2530	2554	2568
10°	2506	2552	2580
15°	2466	2541	2588
20°	2413	2523	2593
25°	2345	2498	2590
30°	2266	2466	2586
35°	2185	2430	2595
40°	2092	2400	2603
45°	1993	2369	2624
50°	1906	2348	2644
55°	1804	2329	2685
60°	1710	2319	2714
65°	1597	2302	2735
70°	1467	2267	2773
75°	1325	2207	2675
80°	1136	1954	2013
85°	914	1152	914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	3.3
10°-20°	256.6	9.5
20°-30°	385.4	14.2
30°-40°	459.7	17.0
40°-50°	475.3	17.5
50°-60°	437.0	16.1
60°-70°	347.9	12.8
70°-80°	212.5	7.8
80°-90°	46.2	1.7
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°	731.8	27.0
0°-40°	1191.5	44.0
0°-60°	2103.7	77.6
0°-90°	2710.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2710.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	936	939	946	949	951	89
15°	885	895	912	925	929	249
25°	790	809	841	864	872	363
35°	665	693	740	778	790	415
45°	524	561	623	673	690	405
55°	385	427	496	553	572	344
65°	251	293	362	412	430	248
75°	127	165	212	250	257	136
85°	30	36	37	32	30	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	941.6	942.9	946.8	949.3	949.3
5°	936.5	939.1	945.5	949.3	950.6
7.5°	928.8	932.6	941.6	946.8	948.1
10°	917.2	922.3	933.9	941.6	944.2
12.5°	903.0	910.8	924.9	935.2	937.8
15°	885.0	895.3	912.0	924.9	928.8
17.5°	864.4	877.3	897.9	913.3	918.5
20°	842.6	855.4	881.2	899.2	905.6
22.5°	816.8	833.6	863.2	883.7	888.9
25°	789.8	809.1	841.3	864.4	872.2
27.5°	760.2	783.4	818.1	846.4	852.9
30°	729.4	753.8	793.7	824.6	832.3
32.5°	697.2	725.5	768.0	802.7	813.0
35°	665.1	693.4	739.7	778.3	789.8
37.5°	627.8	661.2	712.7	752.5	766.7
40°	595.6	627.8	683.1	726.8	741.0
42.5°	559.6	594.3	652.2	699.8	716.5
45°	523.6	560.9	622.6	672.8	689.5
47.5°	490.1	527.4	591.7	644.5	661.2
50°	455.4	494.0	560.9	614.9	631.6
52.5°	418.1	460.5	530.0	584.0	603.3
55°	384.6	427.1	496.5	553.1	572.4
57.5°	349.9	393.6	465.7	519.7	537.7
60°	317.7	360.2	430.9	483.7	504.3
62.5°	283.0	326.7	396.2	447.7	467.0
65°	250.8	293.3	361.5	411.6	429.6
67.5°	218.7	261.1	325.5	373.0	393.6
70°	186.5	229.0	288.1	334.5	352.5
72.5°	158.2	195.5	252.1	294.6	311.3
75°	127.4	164.7	212.3	249.6	257.3
77.5°	99.1	132.5	172.4	189.1	191.7
80°	73.3	99.1	126.1	129.9	129.9
82.5°	48.9	68.2	78.5	79.8	78.5
85°	29.6	36.0	37.3	32.2	29.6
87.5°	10.3	10.3	6.4	3.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)