

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: P387800

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L940-CD1-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: P387800
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: 22CZ2-29HE-SQR-UNV-L940-CD1-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: 2413.6 lumens
Efficiency: N/A
Efficacy: 108.7 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

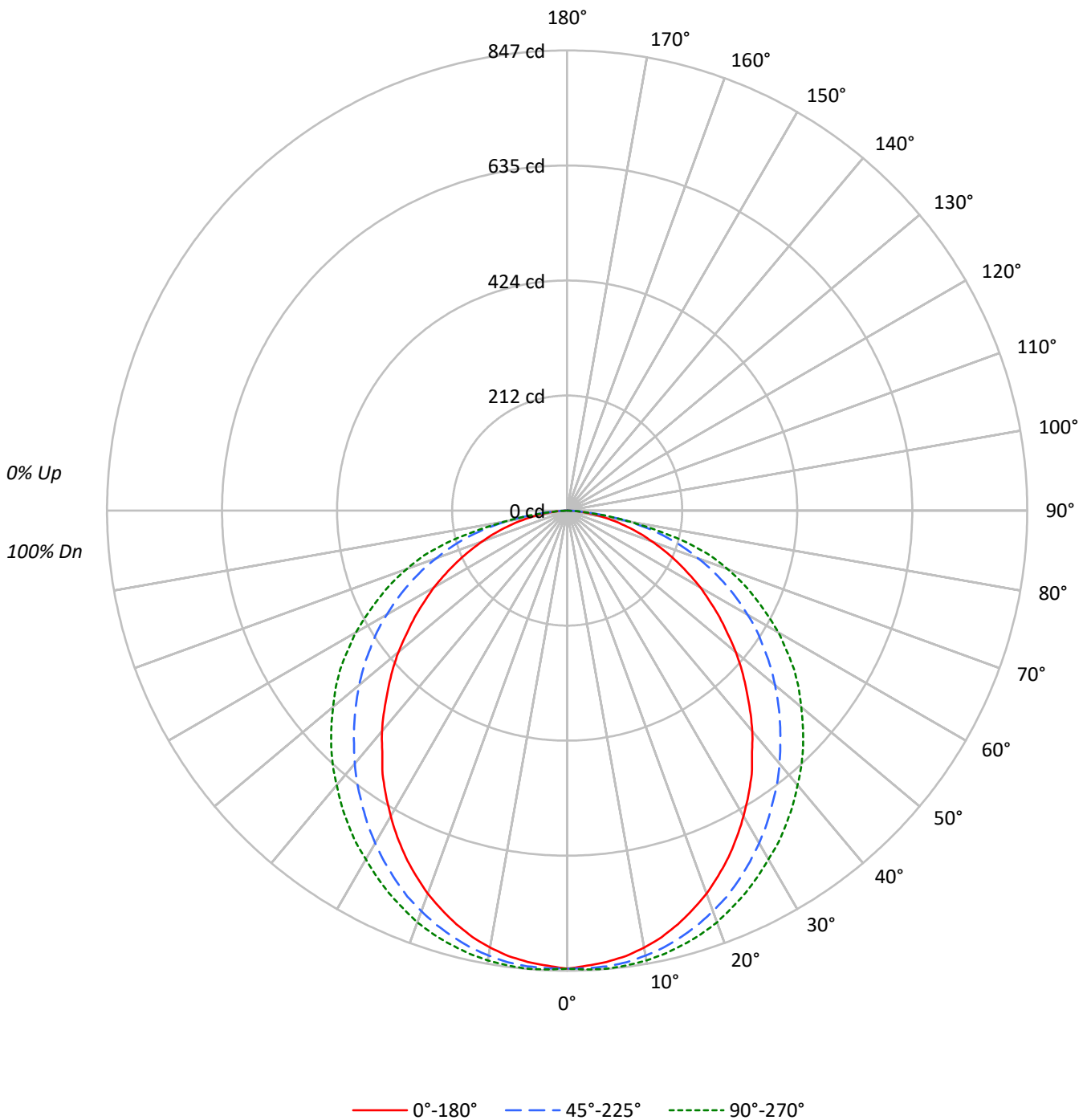
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	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	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	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°	2269	2269	2269
5°	2253	2274	2287
10°	2232	2273	2297
15°	2196	2263	2304
20°	2149	2247	2310
25°	2089	2224	2306
30°	2018	2196	2303
35°	1946	2164	2311
40°	1863	2137	2318
45°	1774	2110	2337
50°	1698	2091	2355
55°	1607	2075	2392
60°	1523	2066	2417
65°	1422	2050	2436
70°	1307	2019	2470
75°	1179	1965	2382
80°	1012	1740	1793
85°	812	1025	812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	3.3
10°-20°	228.5	9.5
20°-30°	343.2	14.2
30°-40°	409.4	17.0
40°-50°	423.2	17.5
50°-60°	389.1	16.1
60°-70°	309.8	12.8
70°-80°	189.2	7.8
80°-90°	41.1	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°	651.7	27.0
0°-40°	1061.1	44.0
0°-60°	1873.4	77.6
0°-90°	2413.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2413.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	843	843	843	843	843	
5°	834	836	842	845	847	79
15°	788	797	812	824	827	222
25°	703	721	749	770	777	324
35°	592	618	659	693	703	369
45°	466	500	554	599	614	361
55°	342	380	442	493	510	306
65°	223	261	322	367	383	221
75°	113	147	189	222	229	121
85°	26	32	33	29	26	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	843.1	843.1	843.1	843.1	843.1
2.5°	838.5	839.7	843.1	845.4	845.4
5°	834.0	836.3	842.0	845.4	846.6
7.5°	827.1	830.5	838.5	843.1	844.3
10°	816.8	821.4	831.7	838.5	840.8
12.5°	804.2	811.1	823.7	832.8	835.1
15°	788.1	797.3	812.2	823.7	827.1
17.5°	769.8	781.3	799.6	813.3	817.9
20°	750.3	761.8	784.7	800.7	806.5
22.5°	727.4	742.3	768.7	787.0	791.6
25°	703.4	720.6	749.2	769.8	776.7
27.5°	677.0	697.6	728.6	753.8	759.5
30°	649.5	671.3	706.8	734.3	741.2
32.5°	620.9	646.1	683.9	714.8	724.0
35°	592.3	617.5	658.7	693.1	703.4
37.5°	559.0	588.8	634.6	670.1	682.8
40°	530.4	559.0	608.3	647.2	659.8
42.5°	498.3	529.2	580.8	623.2	638.1
45°	466.2	499.5	554.4	599.1	614.0
47.5°	436.5	469.7	527.0	573.9	588.8
50°	405.5	439.9	499.5	547.6	562.5
52.5°	372.3	410.1	472.0	520.1	537.3
55°	342.5	380.3	442.2	492.6	509.8
57.5°	311.6	350.5	414.7	462.8	478.8
60°	283.0	320.8	383.8	430.7	449.1
62.5°	252.0	291.0	352.8	398.7	415.8
65°	223.4	261.2	321.9	366.6	382.6
67.5°	194.7	232.5	289.8	332.2	350.5
70°	166.1	203.9	256.6	297.8	313.9
72.5°	140.9	174.1	224.5	262.3	277.2
75°	113.4	146.6	189.0	222.2	229.1
77.5°	88.2	118.0	153.5	168.4	170.7
80°	65.3	88.2	112.3	115.7	115.7
82.5°	43.5	60.7	69.9	71.0	69.9
85°	26.3	32.1	33.2	28.6	26.3
87.5°	9.2	9.2	5.7	3.4	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)