

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: P390460

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L940-CD1-SWPD1-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: P390460
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-HRP-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3960.0 lumens
Efficiency: N/A
Efficacy: 100.5 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

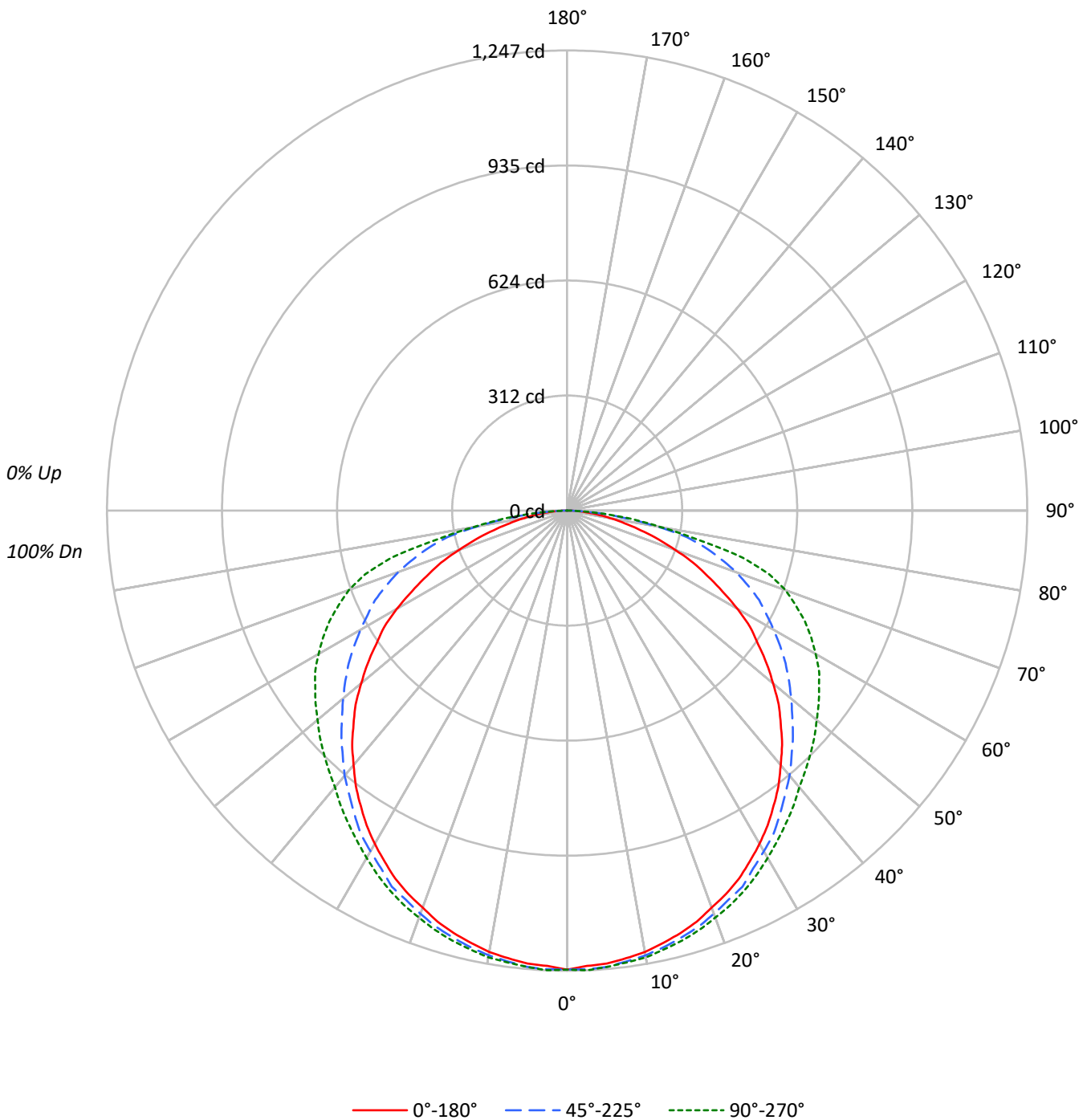
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3347	3347	3347
5°	3329	3352	3352
10°	3319	3343	3359
15°	3303	3336	3360
20°	3279	3328	3362
25°	3270	3339	3373
30°	3241	3313	3376
35°	3206	3302	3397
40°	3162	3295	3438
45°	3115	3293	3548
50°	3049	3317	3695
55°	2966	3390	3909
60°	2869	3481	4186
65°	2671	3654	4526
70°	2452	3828	4950
75°	2150	4028	5119
80°	1850	3837	4018
85°	1618	2788	3057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	3.0
10°-20°	337.8	8.5
20°-30°	515.4	13.0
30°-40°	629.4	15.9
40°-50°	672.9	17.0
50°-60°	649.5	16.4
60°-70°	559.1	14.1
70°-80°	378.3	9.6
80°-90°	99.8	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°	970.9	24.5
0°-40°	1600.3	40.4
0°-60°	2922.8	73.8
0°-90°	3960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1232	1235	1241	1241	1241	117
15°	1186	1189	1197	1203	1206	334
25°	1101	1107	1124	1130	1136	507
35°	976	985	1005	1025	1034	611
45°	819	833	865	909	932	632
55°	632	652	722	795	833	566
65°	420	460	574	664	711	417
75°	207	274	387	466	492	222
85°	52	73	90	93	99	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1243.9	1243.9	1243.9	1243.9	1243.9
2.5°	1235.2	1238.1	1243.9	1243.9	1246.8
5°	1232.3	1235.2	1241.0	1241.0	1241.0
7.5°	1223.5	1226.4	1232.3	1235.2	1235.2
10°	1214.8	1217.7	1223.5	1226.4	1229.3
12.5°	1200.2	1203.1	1211.9	1217.7	1217.7
15°	1185.6	1188.6	1197.3	1203.1	1206.0
17.5°	1168.2	1174.0	1182.7	1188.6	1191.5
20°	1144.9	1150.7	1162.3	1171.1	1174.0
22.5°	1124.5	1130.3	1141.9	1150.7	1156.5
25°	1101.2	1107.0	1124.5	1130.3	1136.1
27.5°	1072.0	1077.9	1092.4	1104.1	1112.8
30°	1042.9	1048.7	1066.2	1080.8	1086.6
32.5°	1010.9	1019.6	1040.0	1051.6	1060.4
35°	975.9	984.6	1005.0	1025.4	1034.2
37.5°	940.9	949.7	970.1	996.3	1007.9
40°	900.2	911.8	938.0	973.0	978.8
42.5°	862.3	876.9	900.2	940.9	955.5
45°	818.6	833.2	865.2	908.9	932.2
47.5°	777.8	792.4	827.3	879.8	908.9
50°	728.3	748.7	792.4	853.5	882.7
52.5°	681.7	699.2	757.4	824.4	859.4
55°	632.1	652.5	722.5	795.3	833.2
57.5°	588.5	605.9	684.6	766.2	809.8
60°	533.1	556.4	646.7	734.1	777.8
62.5°	474.8	509.8	608.8	699.2	745.8
65°	419.5	460.3	573.9	664.2	710.8
67.5°	370.0	413.7	530.2	626.3	670.0
70°	311.7	367.1	486.5	579.7	629.2
72.5°	259.3	320.4	437.0	530.2	573.9
75°	206.8	273.8	387.4	466.1	492.3
77.5°	160.2	224.3	332.1	355.4	358.3
80°	119.4	177.7	247.6	250.5	259.3
82.5°	81.6	125.3	160.2	174.8	177.7
85°	52.4	72.8	90.3	93.2	99.0
87.5°	23.3	26.2	32.0	29.1	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)