

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: P390267

Luminaire Tested: **22CZ2-34VHE-HRP-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: P390267
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: 22CZ2-34VHE-HRP-UNV-L940-CD1-SDWPD1-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: 2545.4 lumens
Efficiency: N/A
Efficacy: 101.4 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

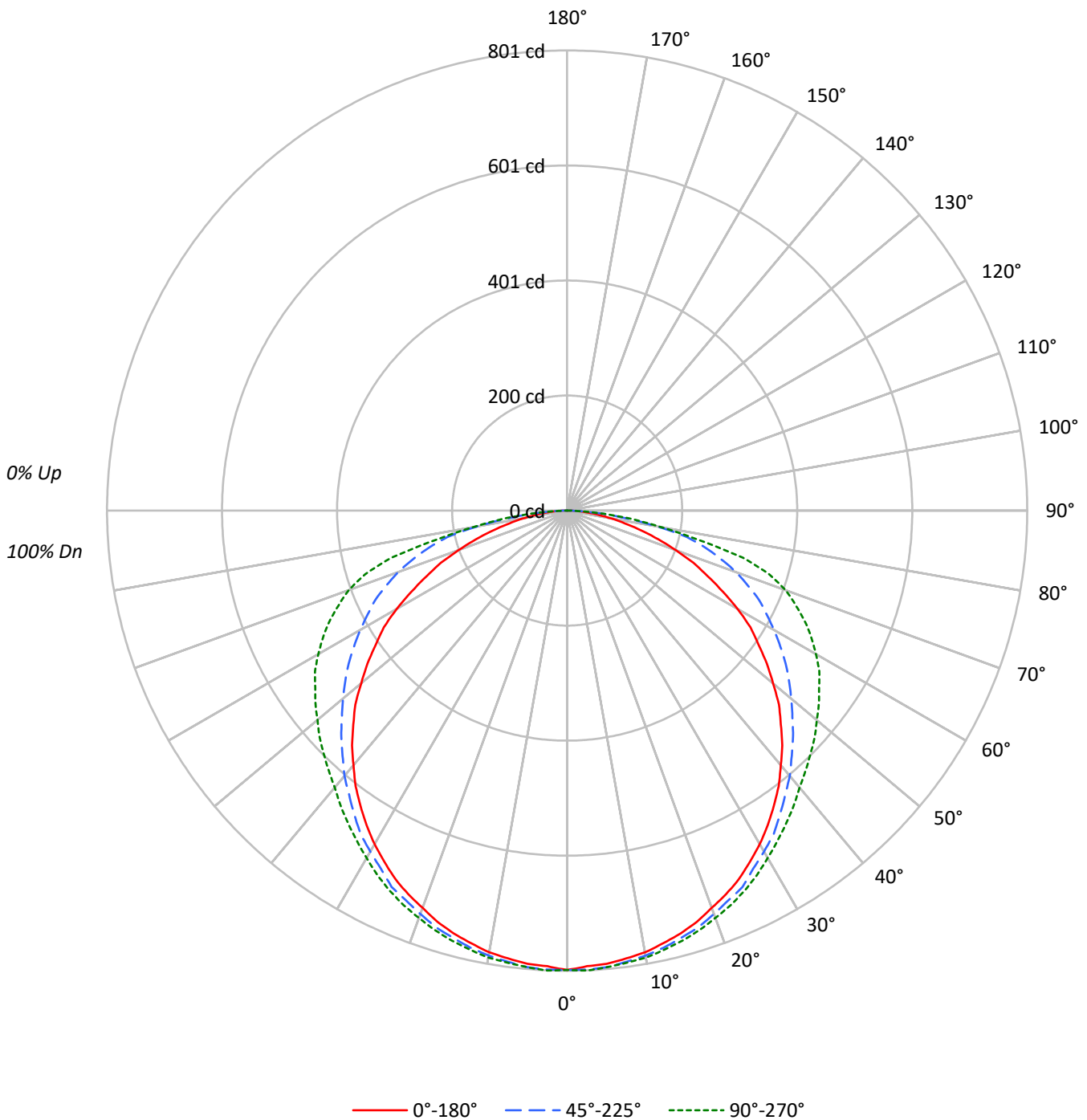
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390267

CATALOG NUMBER: 22CZ2-34VHE-HRP-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390267

CATALOG NUMBER: 22CZ2-34VHE-HRP-UNV-L940-CD1-SDWPD1-U

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°	2152	2152	2152
5°	2140	2155	2155
10°	2134	2149	2159
15°	2123	2144	2160
20°	2107	2139	2161
25°	2102	2146	2168
30°	2083	2129	2170
35°	2061	2122	2184
40°	2033	2118	2210
45°	2003	2116	2280
50°	1960	2132	2375
55°	1906	2179	2512
60°	1844	2237	2691
65°	1717	2349	2909
70°	1577	2460	3183
75°	1382	2589	3291
80°	1190	2467	2583
85°	1041	1791	1967



TEST NUMBER: P390267

CATALOG NUMBER: 22CZ2-34VHE-HRP-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	3.0
10°-20°	217.2	8.5
20°-30°	331.3	13.0
30°-40°	404.5	15.9
40°-50°	432.5	17.0
50°-60°	417.5	16.4
60°-70°	359.4	14.1
70°-80°	243.2	9.6
80°-90°	64.2	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°	624.1	24.5
0°-40°	1028.6	40.4
0°-60°	1878.7	73.8
0°-90°	2545.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2545.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	792	794	798	798	798	75
15°	762	764	770	773	775	215
25°	708	712	723	726	730	326
35°	627	633	646	659	665	393
45°	526	536	556	584	599	406
55°	406	419	464	511	536	364
65°	270	296	369	427	457	268
75°	133	176	249	300	316	143
85°	34	47	58	60	64	38
90°	0	0	0	0	0	



TEST NUMBER: P390267

CATALOG NUMBER: 22CZ2-34VHE-HRP-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	799.6	799.6	799.6	799.6	799.6
2.5°	793.9	795.8	799.6	799.6	801.4
5°	792.1	793.9	797.7	797.7	797.7
7.5°	786.4	788.3	792.1	793.9	793.9
10°	780.8	782.7	786.4	788.3	790.2
12.5°	771.5	773.3	779.0	782.7	782.7
15°	762.1	764.0	769.6	773.3	775.2
17.5°	750.9	754.6	760.2	764.0	765.8
20°	735.9	739.6	747.1	752.7	754.6
22.5°	722.8	726.5	734.0	739.6	743.4
25°	707.8	711.5	722.8	726.5	730.3
27.5°	689.1	692.8	702.2	709.7	715.3
30°	670.4	674.1	685.3	694.7	698.4
32.5°	649.8	655.4	668.5	676.0	681.6
35°	627.3	632.9	646.0	659.1	664.7
37.5°	604.8	610.4	623.5	640.4	647.9
40°	578.6	586.1	602.9	625.4	629.2
42.5°	554.3	563.6	578.6	604.8	614.2
45°	526.2	535.5	556.1	584.2	599.2
47.5°	500.0	509.3	531.8	565.5	584.2
50°	468.1	481.2	509.3	548.6	567.4
52.5°	438.2	449.4	486.8	529.9	552.4
55°	406.3	419.4	464.4	511.2	535.5
57.5°	378.2	389.5	440.0	492.5	520.6
60°	342.7	357.6	415.7	471.9	500.0
62.5°	305.2	327.7	391.4	449.4	479.4
65°	269.6	295.9	368.9	426.9	456.9
67.5°	237.8	265.9	340.8	402.6	430.7
70°	200.4	235.9	312.7	372.6	404.5
72.5°	166.7	206.0	280.9	340.8	368.9
75°	132.9	176.0	249.0	299.6	316.5
77.5°	103.0	144.2	213.5	228.4	230.3
80°	76.8	114.2	159.2	161.0	166.7
82.5°	52.4	80.5	103.0	112.3	114.2
85°	33.7	46.8	58.0	59.9	63.7
87.5°	15.0	16.9	20.6	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)