

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: P390147

Luminaire Tested: **22CZ2-20VHE-RDP-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: P390147
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: 22CZ2-20VHE-RDP-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1125.6 lumens
Efficiency: N/A
Efficacy: 79.3 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

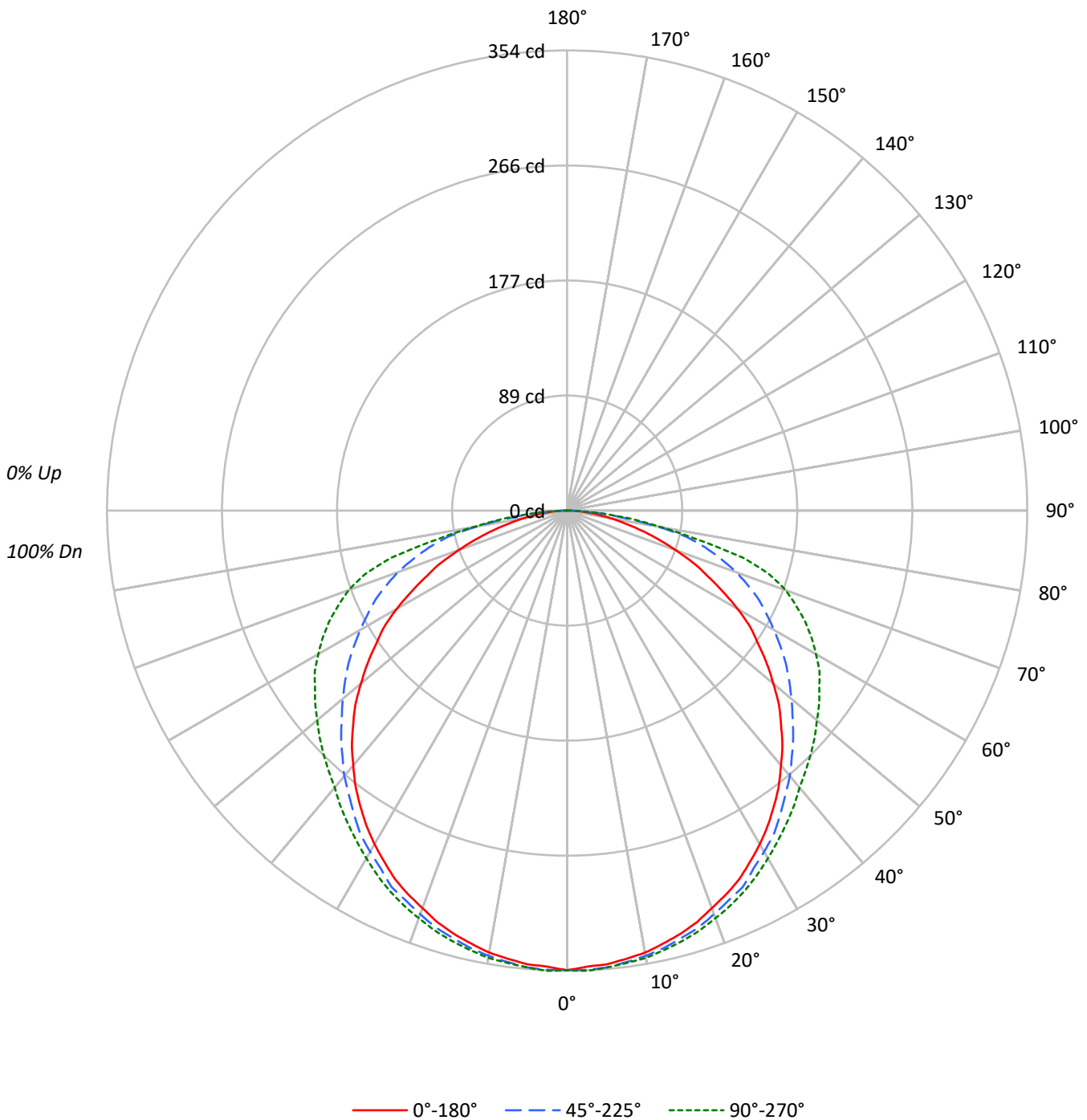
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	952	952	952
5°	946	953	953
10°	944	950	955
15°	939	948	955
20°	932	946	956
25°	929	949	959
30°	921	942	960
35°	911	939	966
40°	899	937	977
45°	886	936	1008
50°	867	943	1050
55°	843	964	1111
60°	815	989	1190
65°	759	1039	1286
70°	697	1088	1408
75°	611	1145	1455
80°	525	1091	1142
85°	460	794	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	3.0
10°-20°	96.0	8.5
20°-30°	146.5	13.0
30°-40°	178.9	15.9
40°-50°	191.3	17.0
50°-60°	184.6	16.4
60°-70°	158.9	14.1
70°-80°	107.5	9.6
80°-90°	28.4	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°	276.0	24.5
0°-40°	454.9	40.4
0°-60°	830.8	73.8
0°-90°	1125.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1125.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	350	351	353	353	353	33
15°	337	338	340	342	343	95
25°	313	315	320	321	323	144
35°	277	280	286	292	294	174
45°	233	237	246	258	265	180
55°	180	186	205	226	237	161
65°	119	131	163	189	202	119
75°	59	78	110	132	140	63
85°	15	21	26	26	28	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	353.6	353.6	353.6	353.6	353.6
2.5°	351.1	351.9	353.6	353.6	354.4
5°	350.3	351.1	352.7	352.7	352.7
7.5°	347.8	348.6	350.3	351.1	351.1
10°	345.3	346.1	347.8	348.6	349.4
12.5°	341.2	342.0	344.5	346.1	346.1
15°	337.0	337.8	340.3	342.0	342.8
17.5°	332.0	333.7	336.2	337.8	338.7
20°	325.4	327.1	330.4	332.9	333.7
22.5°	319.6	321.3	324.6	327.1	328.7
25°	313.0	314.7	319.6	321.3	322.9
27.5°	304.7	306.4	310.5	313.8	316.3
30°	296.4	298.1	303.1	307.2	308.9
32.5°	287.3	289.8	295.6	298.9	301.4
35°	277.4	279.9	285.7	291.5	294.0
37.5°	267.5	269.9	275.7	283.2	286.5
40°	255.9	259.2	266.6	276.6	278.2
42.5°	245.1	249.2	255.9	267.5	271.6
45°	232.7	236.8	245.9	258.3	265.0
47.5°	221.1	225.2	235.2	250.1	258.3
50°	207.0	212.8	225.2	242.6	250.9
52.5°	193.8	198.7	215.3	234.3	244.3
55°	179.7	185.5	205.4	226.1	236.8
57.5°	167.3	172.2	194.6	217.8	230.2
60°	151.5	158.2	183.8	208.7	221.1
62.5°	135.0	144.9	173.1	198.7	212.0
65°	119.2	130.8	163.1	188.8	202.0
67.5°	105.2	117.6	150.7	178.0	190.4
70°	88.6	104.3	138.3	164.8	178.9
72.5°	73.7	91.1	124.2	150.7	163.1
75°	58.8	77.8	110.1	132.5	139.9
77.5°	45.5	63.8	94.4	101.0	101.8
80°	33.9	50.5	70.4	71.2	73.7
82.5°	23.2	35.6	45.5	49.7	50.5
85°	14.9	20.7	25.7	26.5	28.2
87.5°	6.6	7.5	9.1	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)