

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: P390628

Luminaire Tested: **22CZ2-70VHE-RDP-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: P390628
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: 22CZ2-70VHE-RDP-UNV-L940-CD1-SWPD1-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: 3981.4 lumens
Efficiency: N/A
Efficacy: 79.2 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

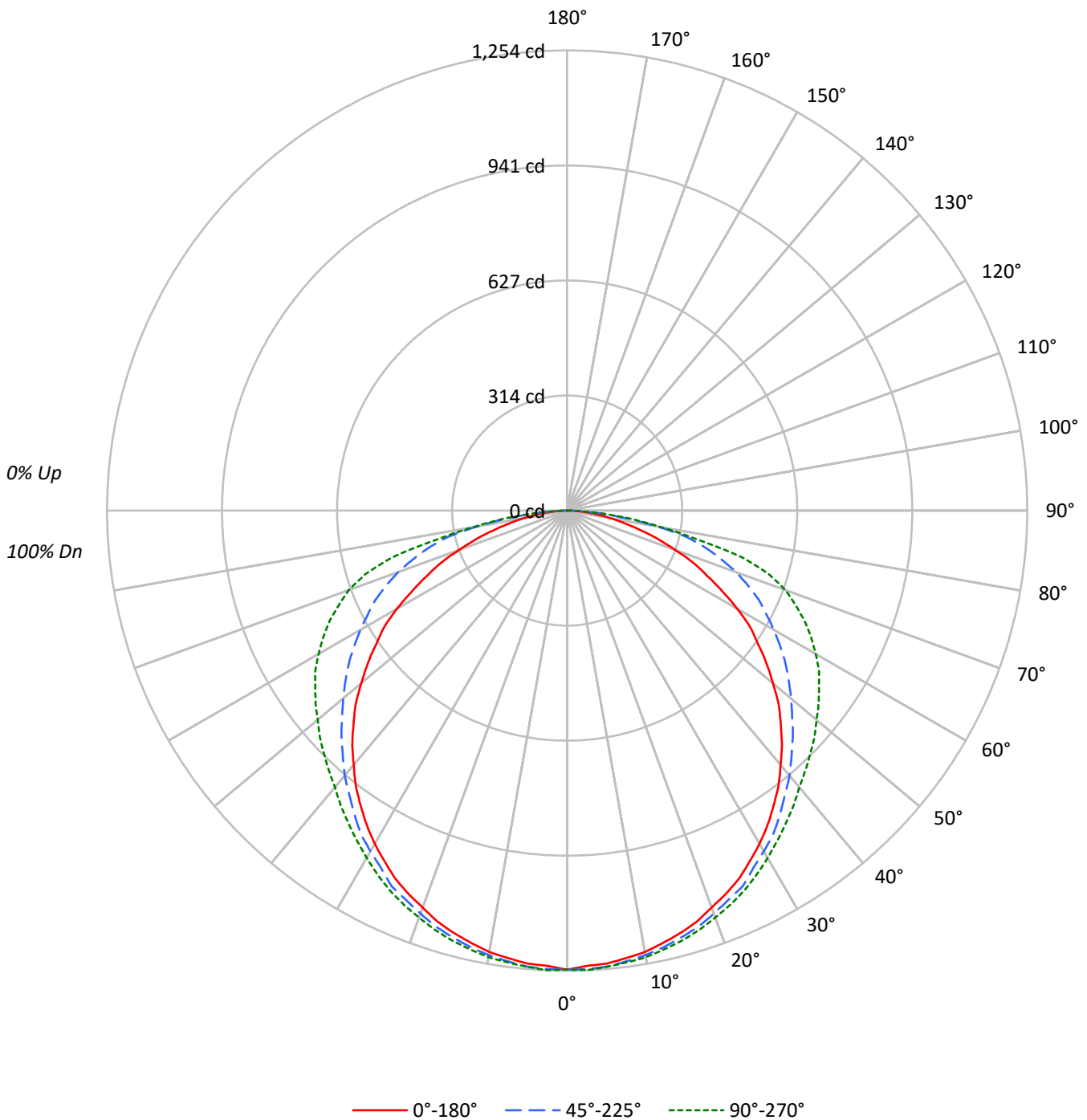
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3365	3365	3365
5°	3347	3370	3370
10°	3337	3361	3377
15°	3321	3354	3378
20°	3296	3346	3380
25°	3287	3357	3392
30°	3258	3331	3395
35°	3223	3320	3415
40°	3179	3313	3457
45°	3132	3311	3567
50°	3065	3335	3715
55°	2982	3408	3930
60°	2885	3499	4209
65°	2686	3674	4550
70°	2466	3848	4977
75°	2162	4050	5147
80°	1861	3859	4040
85°	1627	2803	3075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.0
10°-20°	339.7	8.5
20°-30°	518.2	13.0
30°-40°	632.8	15.9
40°-50°	676.6	17.0
50°-60°	653.0	16.4
60°-70°	562.2	14.1
70°-80°	380.3	9.6
80°-90°	100.4	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°	976.2	24.5
0°-40°	1608.9	40.4
0°-60°	2938.6	73.8
0°-90°	3981.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3981.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1239	1242	1248	1248	1248	118
15°	1192	1195	1204	1210	1213	336
25°	1107	1113	1130	1136	1142	510
35°	981	990	1010	1031	1040	614
45°	823	838	870	914	937	635
55°	636	656	726	800	838	570
65°	422	463	577	668	715	419
75°	208	275	390	469	495	223
85°	53	73	91	94	100	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1250.6	1250.6	1250.6	1250.6	1250.6
2.5°	1241.8	1244.8	1250.6	1250.6	1253.6
5°	1238.9	1241.8	1247.7	1247.7	1247.7
7.5°	1230.1	1233.1	1238.9	1241.8	1241.8
10°	1221.3	1224.3	1230.1	1233.1	1236.0
12.5°	1206.7	1209.6	1218.4	1224.3	1224.3
15°	1192.0	1195.0	1203.8	1209.6	1212.6
17.5°	1174.5	1180.3	1189.1	1195.0	1197.9
20°	1151.0	1156.9	1168.6	1177.4	1180.3
22.5°	1130.5	1136.4	1148.1	1156.9	1162.8
25°	1107.1	1113.0	1130.5	1136.4	1142.3
27.5°	1077.8	1083.7	1098.3	1110.0	1118.8
30°	1048.5	1054.4	1072.0	1086.6	1092.5
32.5°	1016.3	1025.1	1045.6	1057.3	1066.1
35°	981.2	990.0	1010.5	1031.0	1039.7
37.5°	946.0	954.8	975.3	1001.7	1013.4
40°	905.0	916.7	943.1	978.2	984.1
42.5°	866.9	881.6	905.0	946.0	960.7
45°	823.0	837.7	869.9	913.8	937.2
47.5°	782.0	796.7	831.8	884.5	913.8
50°	732.2	752.7	796.7	858.2	887.4
52.5°	685.4	702.9	761.5	828.9	864.0
55°	635.6	656.1	726.4	799.6	837.7
57.5°	591.6	609.2	688.3	770.3	814.2
60°	536.0	559.4	650.2	738.1	782.0
62.5°	477.4	512.6	612.1	702.9	749.8
65°	421.8	462.8	577.0	667.8	714.6
67.5°	372.0	415.9	533.1	629.7	673.6
70°	313.4	369.0	489.1	582.8	632.6
72.5°	260.7	322.2	439.3	533.1	577.0
75°	207.9	275.3	389.5	468.6	495.0
77.5°	161.1	225.5	333.9	357.3	360.3
80°	120.1	178.7	249.0	251.9	260.7
82.5°	82.0	125.9	161.1	175.7	178.7
85°	52.7	73.2	90.8	93.7	99.6
87.5°	23.4	26.4	32.2	29.3	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)