

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: P390629

Luminaire Tested: **22CZ2-70VHE-RDP-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: P390629
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-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: 4031.4 lumens
Efficiency: N/A
Efficacy: 80.1 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

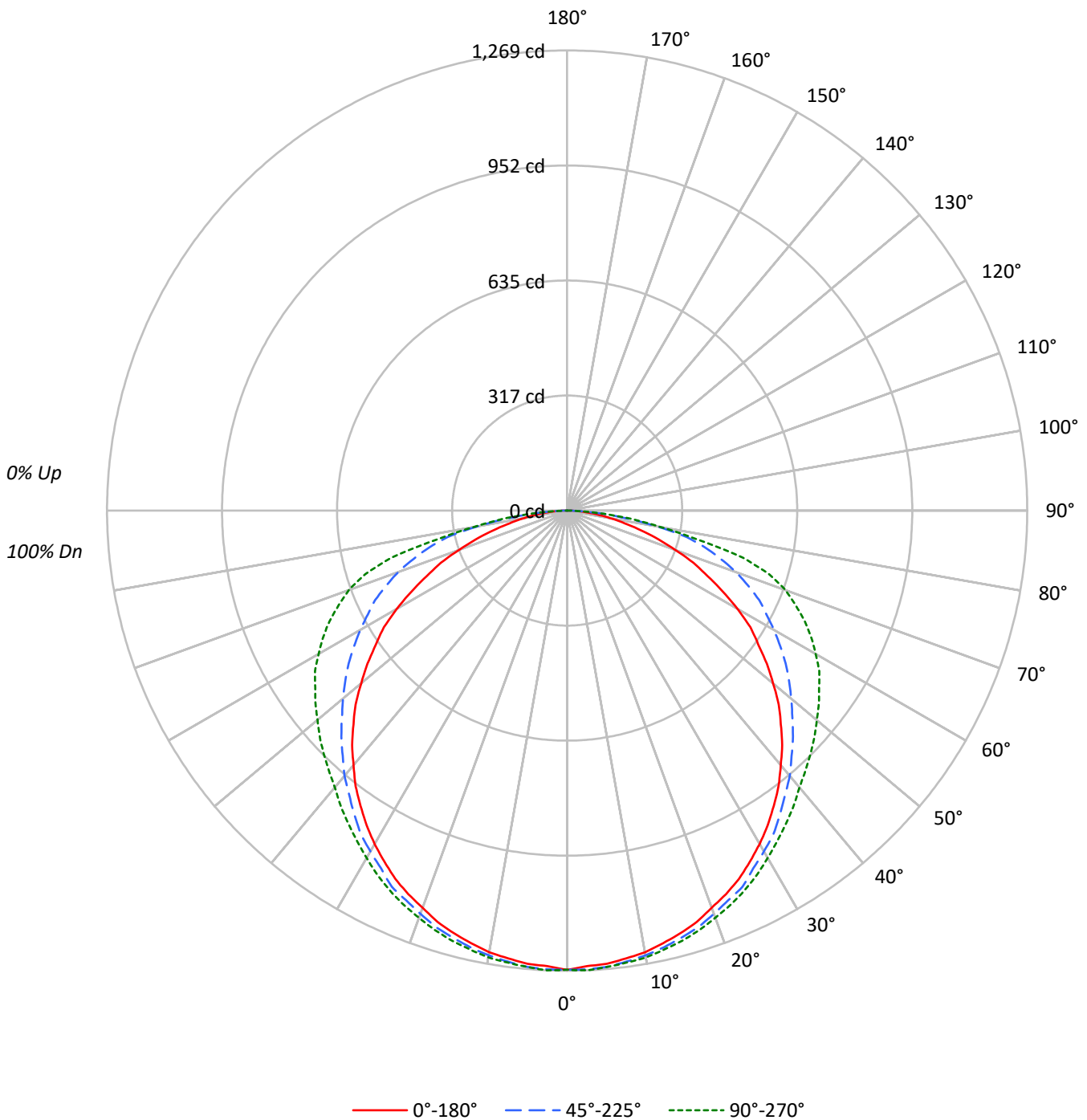
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3408	3408	3408
5°	3389	3413	3413
10°	3379	3404	3420
15°	3363	3396	3421
20°	3338	3389	3423
25°	3328	3399	3434
30°	3299	3373	3437
35°	3264	3361	3459
40°	3219	3354	3501
45°	3171	3352	3612
50°	3104	3377	3762
55°	3019	3451	3979
60°	2921	3543	4261
65°	2720	3720	4607
70°	2496	3897	5040
75°	2190	4101	5211
80°	1884	3907	4090
85°	1649	2837	3112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	3.0
10°-20°	343.9	8.5
20°-30°	524.7	13.0
30°-40°	640.7	15.9
40°-50°	685.1	17.0
50°-60°	661.2	16.4
60°-70°	569.2	14.1
70°-80°	385.1	9.6
80°-90°	101.6	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°	988.4	24.5
0°-40°	1629.2	40.4
0°-60°	2975.5	73.8
0°-90°	4031.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4031.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1254	1257	1263	1263	1263	119
15°	1207	1210	1219	1225	1228	341
25°	1121	1127	1145	1151	1157	516
35°	994	1002	1023	1044	1053	622
45°	833	848	881	925	949	643
55°	644	664	736	810	848	577
65°	427	469	584	676	724	425
75°	211	279	394	474	501	226
85°	53	74	92	95	101	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.3	1266.3	1266.3	1266.3	1266.3
2.5°	1257.4	1260.4	1266.3	1266.3	1269.3
5°	1254.5	1257.4	1263.4	1263.4	1263.4
7.5°	1245.6	1248.5	1254.5	1257.4	1257.4
10°	1236.7	1239.6	1245.6	1248.5	1251.5
12.5°	1221.8	1224.8	1233.7	1239.6	1239.6
15°	1207.0	1210.0	1218.9	1224.8	1227.8
17.5°	1189.2	1195.2	1204.1	1210.0	1213.0
20°	1165.5	1171.4	1183.3	1192.2	1195.2
22.5°	1144.7	1150.7	1162.5	1171.4	1177.4
25°	1121.0	1126.9	1144.7	1150.7	1156.6
27.5°	1091.4	1097.3	1112.1	1124.0	1132.9
30°	1061.7	1067.6	1085.4	1100.3	1106.2
32.5°	1029.1	1038.0	1058.7	1070.6	1079.5
35°	993.5	1002.4	1023.1	1043.9	1052.8
37.5°	957.9	966.8	987.6	1014.3	1026.1
40°	916.4	928.2	954.9	990.5	996.5
42.5°	877.8	892.7	916.4	957.9	972.7
45°	833.3	848.2	880.8	925.3	949.0
47.5°	791.8	806.7	842.2	895.6	925.3
50°	741.4	762.2	806.7	868.9	898.6
52.5°	694.0	711.8	771.1	839.3	874.9
55°	643.5	664.3	735.5	809.6	848.2
57.5°	599.1	616.9	696.9	780.0	824.5
60°	542.7	566.4	658.4	747.3	791.8
62.5°	483.4	519.0	619.8	711.8	759.2
65°	427.1	468.6	584.2	676.2	723.6
67.5°	376.6	421.1	539.7	637.6	682.1
70°	317.3	373.7	495.3	590.2	640.6
72.5°	263.9	326.2	444.8	539.7	584.2
75°	210.6	278.8	394.4	474.5	501.2
77.5°	163.1	228.4	338.1	361.8	364.8
80°	121.6	180.9	252.1	255.0	263.9
82.5°	83.0	127.5	163.1	177.9	180.9
85°	53.4	74.1	91.9	94.9	100.8
87.5°	23.7	26.7	32.6	29.7	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)