

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: P390550

Luminaire Tested: **22CZ2-65VHE-HRP-UNV-L930-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: P390550
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: 22CZ2-65VHE-HRP-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4536.6 lumens
Efficiency: N/A
Efficacy: 94.7 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

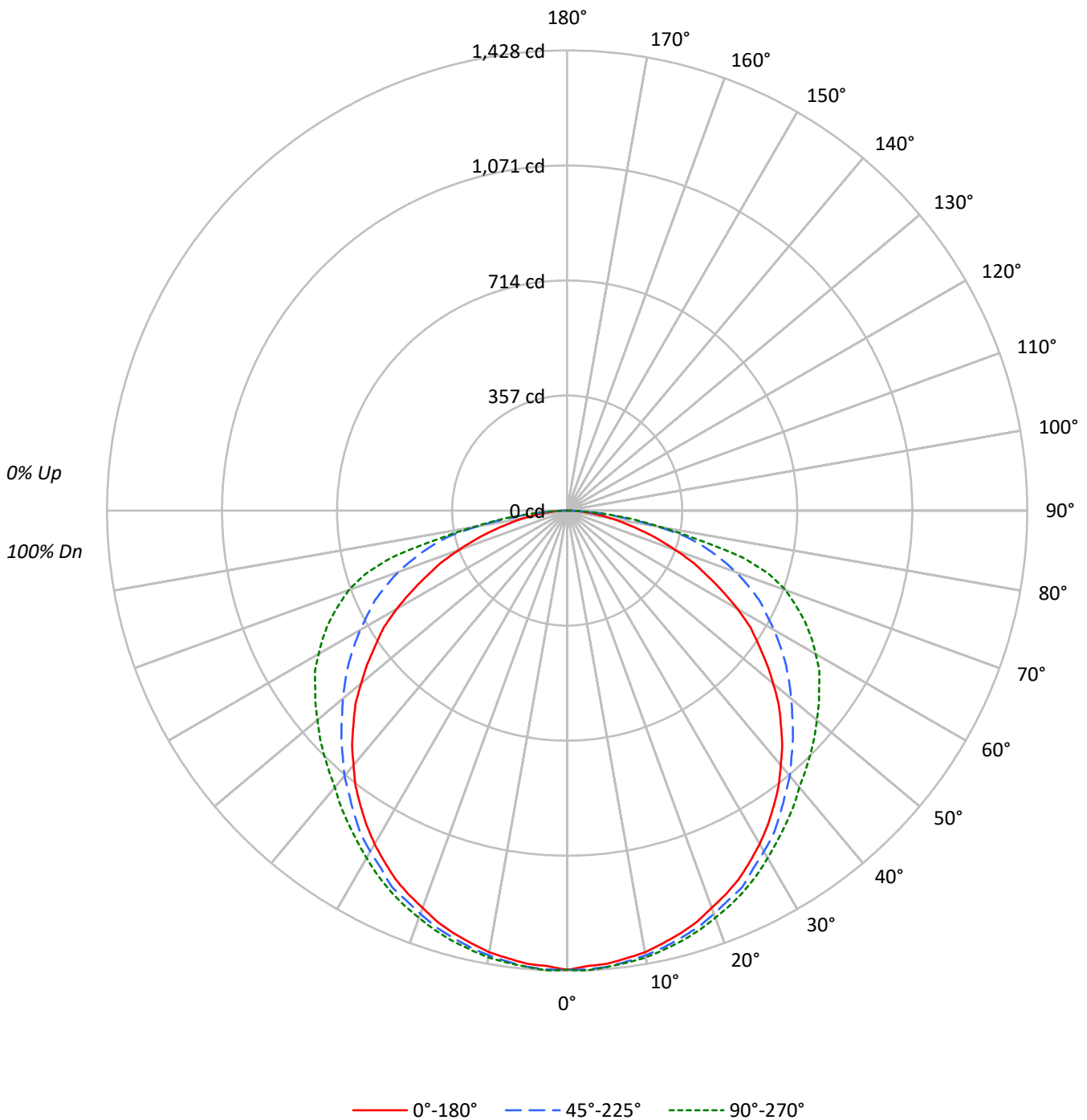
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3835	3835	3835
5°	3813	3840	3840
10°	3803	3830	3848
15°	3784	3821	3849
20°	3756	3813	3851
25°	3746	3825	3864
30°	3713	3796	3868
35°	3673	3782	3892
40°	3622	3775	3939
45°	3569	3772	4064
50°	3493	3800	4233
55°	3398	3883	4478
60°	3287	3987	4796
65°	3060	4186	5185
70°	2810	4385	5672
75°	2463	4615	5864
80°	2120	4396	4603
85°	1856	3196	3504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	3.0
10°-20°	387.0	8.5
20°-30°	590.5	13.0
30°-40°	721.0	15.9
40°-50°	770.9	17.0
50°-60°	744.1	16.4
60°-70°	640.5	14.1
70°-80°	433.4	9.6
80°-90°	114.4	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°	1112.3	24.5
0°-40°	1833.3	40.4
0°-60°	3348.3	73.8
0°-90°	4536.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4536.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1425	1425	1425	1425	1425	
5°	1412	1415	1422	1422	1422	134
15°	1358	1362	1372	1378	1382	383
25°	1262	1268	1288	1295	1302	581
35°	1118	1128	1151	1175	1185	700
45°	938	954	991	1041	1068	724
55°	724	748	828	911	954	649
65°	481	527	657	761	814	478
75°	237	314	444	534	564	254
85°	60	83	104	107	114	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1425.0	1425.0	1425.0	1425.0	1425.0
2.5°	1415.0	1418.4	1425.0	1425.0	1428.4
5°	1411.7	1415.0	1421.7	1421.7	1421.7
7.5°	1401.7	1405.0	1411.7	1415.0	1415.0
10°	1391.7	1395.0	1401.7	1405.0	1408.3
12.5°	1375.0	1378.3	1388.3	1395.0	1395.0
15°	1358.3	1361.6	1371.6	1378.3	1381.6
17.5°	1338.3	1344.9	1354.9	1361.6	1365.0
20°	1311.6	1318.2	1331.6	1341.6	1344.9
22.5°	1288.2	1294.9	1308.2	1318.2	1324.9
25°	1261.5	1268.2	1288.2	1294.9	1301.5
27.5°	1228.1	1234.8	1251.5	1264.8	1274.8
30°	1194.8	1201.4	1221.5	1238.1	1244.8
32.5°	1158.0	1168.1	1191.4	1204.8	1214.8
35°	1118.0	1128.0	1151.4	1174.7	1184.7
37.5°	1077.9	1088.0	1111.3	1141.4	1154.7
40°	1031.2	1044.6	1074.6	1114.7	1121.3
42.5°	987.8	1004.5	1031.2	1077.9	1094.6
45°	937.8	954.5	991.2	1041.2	1067.9
47.5°	891.1	907.7	947.8	1007.9	1041.2
50°	834.3	857.7	907.7	977.8	1011.2
52.5°	780.9	801.0	867.7	944.5	984.5
55°	724.2	747.6	827.6	911.1	954.5
57.5°	674.1	694.2	784.3	877.7	927.8
60°	610.7	637.4	740.9	841.0	891.1
62.5°	544.0	584.0	697.5	801.0	854.3
65°	480.6	527.3	657.4	760.9	814.3
67.5°	423.8	473.9	607.4	717.5	767.6
70°	357.1	420.5	557.3	664.1	720.9
72.5°	297.0	367.1	500.6	607.4	657.4
75°	236.9	313.7	443.9	534.0	564.0
77.5°	183.6	257.0	380.5	407.2	410.5
80°	136.8	203.6	283.7	287.0	297.0
82.5°	93.4	143.5	183.6	200.2	203.6
85°	60.1	83.4	103.5	106.8	113.5
87.5°	26.7	30.0	36.7	33.4	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)