

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: P390647

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L930-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: P390647
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: 22CZ2-75VHE-HRP-UNV-L930-CD1-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: 5292.5 lumens
Efficiency: N/A
Efficacy: 96.8 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

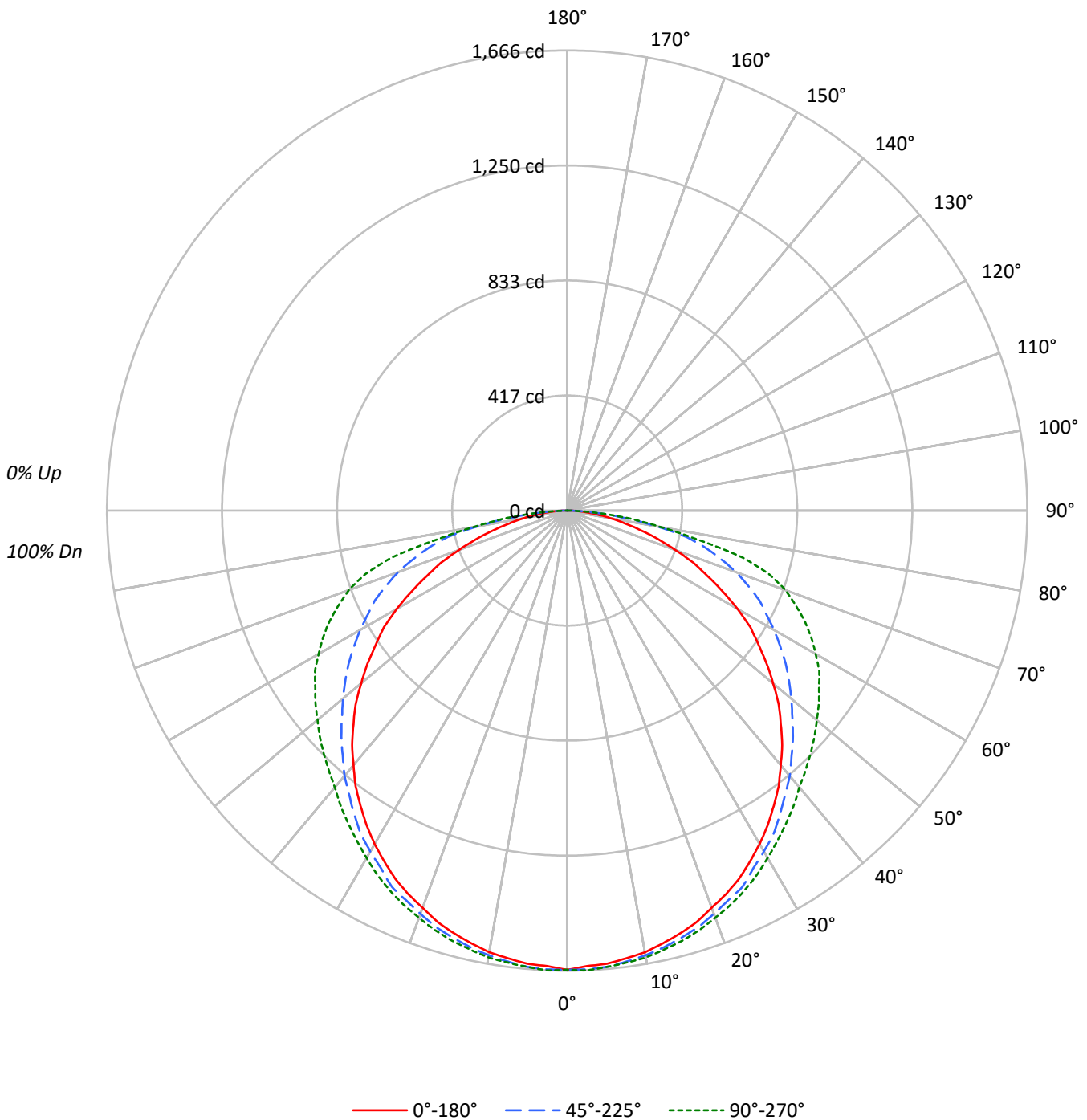
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4474	4474	4474
5°	4449	4480	4480
10°	4436	4468	4489
15°	4415	4458	4491
20°	4382	4449	4493
25°	4370	4462	4508
30°	4331	4428	4512
35°	4285	4413	4540
40°	4226	4404	4595
45°	4163	4400	4741
50°	4075	4433	4939
55°	3964	4530	5224
60°	3835	4652	5595
65°	3570	4884	6049
70°	3278	5116	6617
75°	2874	5384	6841
80°	2473	5128	5370
85°	2164	3727	4088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.0
10°-20°	451.5	8.5
20°-30°	688.9	13.0
30°-40°	841.1	15.9
40°-50°	899.4	17.0
50°-60°	868.1	16.4
60°-70°	747.3	14.1
70°-80°	505.6	9.6
80°-90°	133.4	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°	1297.7	24.5
0°-40°	2138.8	40.4
0°-60°	3906.2	73.8
0°-90°	5292.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5292.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1662	1662	1662	1662	1662	
5°	1647	1651	1659	1659	1659	156
15°	1585	1588	1600	1608	1612	447
25°	1472	1480	1503	1511	1518	677
35°	1304	1316	1343	1370	1382	816
45°	1094	1114	1156	1215	1246	844
55°	845	872	966	1063	1114	757
65°	561	615	767	888	950	558
75°	276	366	518	623	658	297
85°	70	97	121	125	132	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1662.5	1662.5	1662.5	1662.5	1662.5
2.5°	1650.8	1654.7	1662.5	1662.5	1666.4
5°	1646.9	1650.8	1658.6	1658.6	1658.6
7.5°	1635.2	1639.1	1646.9	1650.8	1650.8
10°	1623.5	1627.4	1635.2	1639.1	1643.0
12.5°	1604.1	1608.0	1619.6	1627.4	1627.4
15°	1584.6	1588.5	1600.2	1608.0	1611.9
17.5°	1561.2	1569.0	1580.7	1588.5	1592.4
20°	1530.1	1537.9	1553.5	1565.1	1569.0
22.5°	1502.8	1510.6	1526.2	1537.9	1545.7
25°	1471.7	1479.5	1502.8	1510.6	1518.4
27.5°	1432.8	1440.5	1460.0	1475.6	1487.3
30°	1393.8	1401.6	1425.0	1444.4	1452.2
32.5°	1351.0	1362.7	1389.9	1405.5	1417.2
35°	1304.3	1316.0	1343.2	1370.5	1382.1
37.5°	1257.6	1269.2	1296.5	1331.5	1347.1
40°	1203.0	1218.6	1253.7	1300.4	1308.2
42.5°	1152.4	1171.9	1203.0	1257.6	1277.0
45°	1094.0	1113.5	1156.3	1214.7	1245.9
47.5°	1039.5	1059.0	1105.7	1175.8	1214.7
50°	973.3	1000.6	1059.0	1140.8	1179.7
52.5°	911.0	934.4	1012.3	1101.8	1148.5
55°	844.9	872.1	965.6	1062.9	1113.5
57.5°	786.5	809.8	914.9	1024.0	1082.4
60°	712.5	743.6	864.3	981.1	1039.5
62.5°	634.6	681.3	813.7	934.4	996.7
65°	560.6	615.2	767.0	887.7	950.0
67.5°	494.5	552.9	708.6	837.1	895.5
70°	416.6	490.6	650.2	774.8	841.0
72.5°	346.5	428.3	584.0	708.6	767.0
75°	276.4	366.0	517.8	622.9	658.0
77.5°	214.1	299.8	443.8	475.0	478.9
80°	159.6	237.5	330.9	334.8	346.5
82.5°	109.0	167.4	214.1	233.6	237.5
85°	70.1	97.3	120.7	124.6	132.4
87.5°	31.1	35.0	42.8	38.9	38.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)