

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: P230427

Luminaire Tested: **24CZ-LD5-75-SQP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-75-SQP-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4967.5 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

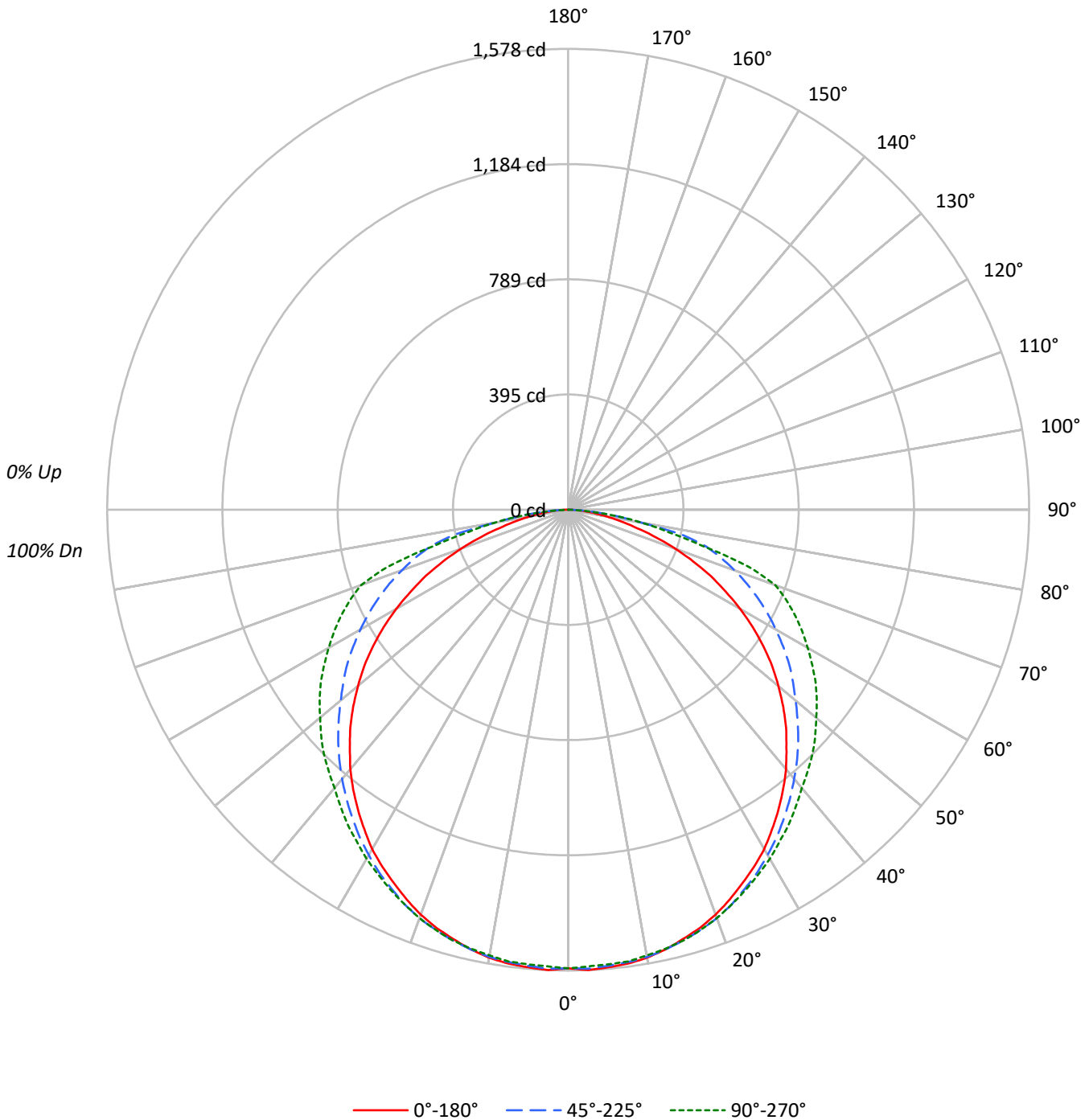
Input Watts (W): 69.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2113	2113	2113
5°	2124	2118	2110
10°	2128	2124	2117
15°	2120	2127	2127
20°	2113	2131	2131
25°	2095	2126	2133
30°	2085	2121	2145
35°	2061	2116	2162
40°	2037	2114	2186
45°	2007	2119	2251
50°	1966	2127	2320
55°	1914	2167	2426
60°	1830	2210	2548
65°	1715	2279	2728
70°	1534	2382	2968
75°	1267	2548	2454
80°	1034	1968	1988
85°	832	1308	1227



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.1	3.0
10°-20°	430.4	8.7
20°-30°	657.7	13.2
30°-40°	804.4	16.2
40°-50°	860.8	17.3
50°-60°	824.2	16.6
60°-70°	697.2	14.0
70°-80°	442.0	8.9
80°-90°	101.7	2.0
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°	1237.2	24.9
0°-40°	2041.7	41.1
0°-60°	3726.7	75.0
0°-90°	4967.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4967.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1573	1565	1568	1565	1563	150
15°	1522	1519	1527	1527	1527	430
25°	1411	1411	1432	1437	1437	651
35°	1255	1262	1288	1306	1316	785
45°	1055	1072	1114	1160	1183	812
55°	816	842	924	1001	1034	728
65°	539	590	716	813	857	531
75°	244	344	490	488	472	265
85°	54	82	85	77	80	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1570.3	1570.3	1570.3	1570.3	1570.3
2.5°	1578.0	1570.3	1572.9	1570.3	1565.2
5°	1572.9	1565.2	1567.8	1565.2	1562.6
7.5°	1567.8	1560.1	1562.6	1560.1	1560.1
10°	1557.5	1549.8	1554.9	1552.4	1549.8
12.5°	1542.1	1537.0	1542.1	1539.5	1539.5
15°	1521.6	1519.0	1526.7	1526.7	1526.7
17.5°	1501.1	1498.5	1508.8	1508.8	1508.8
20°	1475.4	1472.8	1488.2	1488.2	1488.2
22.5°	1444.6	1442.0	1462.6	1462.6	1462.6
25°	1411.2	1411.2	1431.8	1436.9	1436.9
27.5°	1377.9	1377.9	1401.0	1408.7	1408.7
30°	1342.0	1342.0	1365.1	1375.3	1380.5
32.5°	1298.3	1303.5	1329.1	1342.0	1347.1
35°	1254.7	1262.4	1288.1	1306.0	1316.3
37.5°	1208.5	1216.2	1247.0	1267.6	1280.4
40°	1159.8	1170.1	1203.4	1229.1	1244.5
42.5°	1105.9	1121.3	1159.8	1193.1	1213.7
45°	1054.6	1072.5	1113.6	1159.8	1182.9
47.5°	998.1	1018.7	1064.9	1123.9	1147.0
50°	939.1	959.6	1016.1	1082.8	1108.5
52.5°	880.1	903.2	969.9	1041.8	1072.5
55°	816.0	841.6	923.7	1000.7	1034.1
57.5°	749.2	780.0	872.4	954.5	990.4
60°	680.0	718.5	821.1	908.3	946.8
62.5°	608.1	654.3	769.8	862.1	903.2
65°	538.8	590.2	715.9	813.4	857.0
67.5°	464.4	528.6	662.0	767.2	808.3
70°	390.0	464.4	605.6	713.3	754.4
72.5°	315.6	405.4	549.1	646.6	646.6
75°	243.8	343.8	490.1	487.5	472.1
77.5°	184.7	287.4	402.8	343.8	346.4
80°	133.4	230.9	254.0	254.0	256.6
82.5°	89.8	177.0	164.2	161.7	166.8
85°	53.9	82.1	84.7	77.0	79.5
87.5°	25.7	28.2	23.1	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)