

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: P274831

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

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: P274831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65HE-RDP-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (392) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3657.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

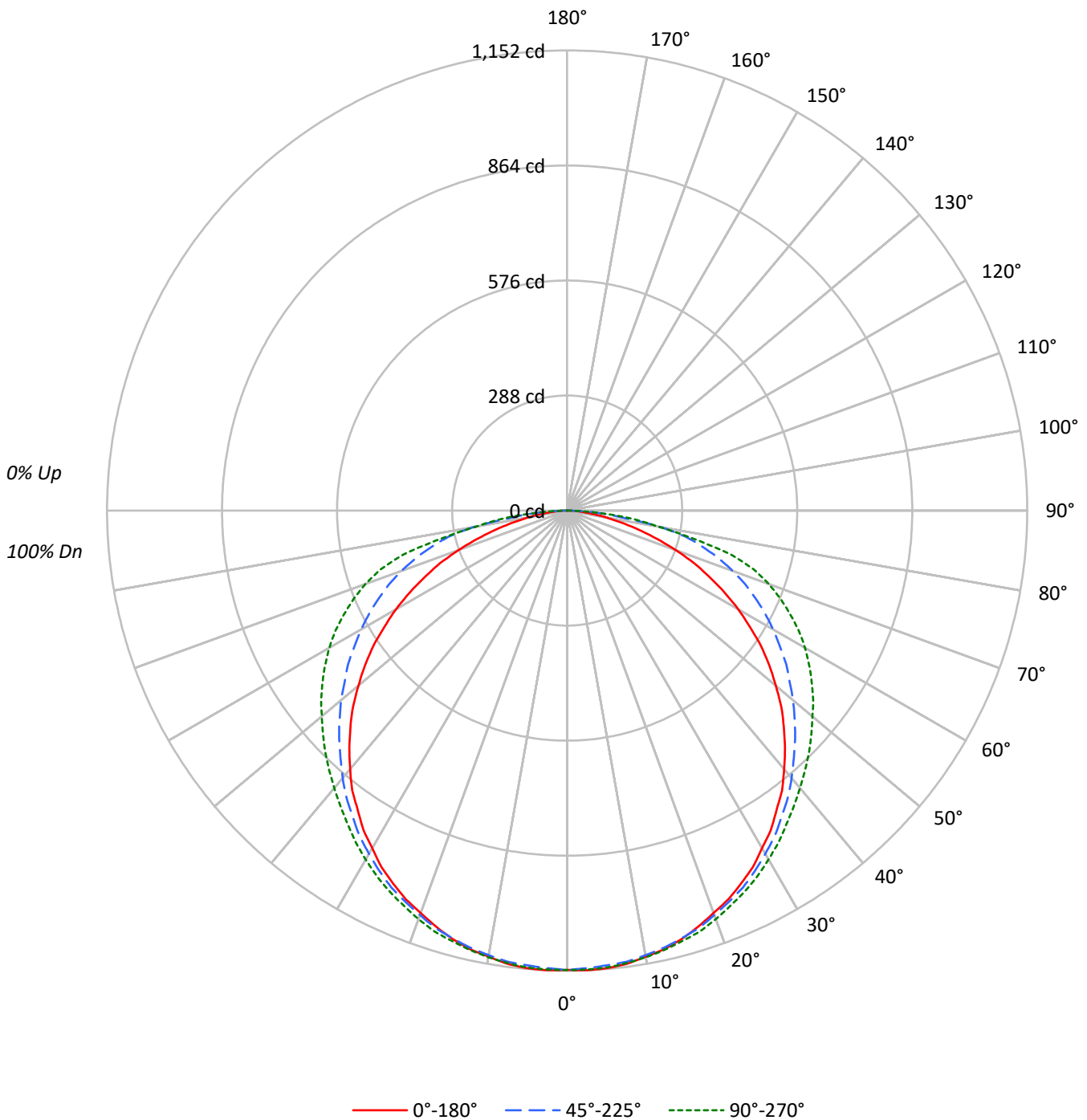
Input Watts (W): 48.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	1547	1547	1547
5°	1553	1543	1551
10°	1549	1544	1551
15°	1546	1544	1554
20°	1535	1543	1558
25°	1530	1546	1562
30°	1516	1542	1567
35°	1502	1537	1573
40°	1485	1536	1593
45°	1460	1536	1629
50°	1428	1545	1678
55°	1392	1570	1753
60°	1333	1601	1850
65°	1247	1657	1963
70°	1135	1734	2112
75°	962	1829	2207
80°	759	1841	1785
85°	560	1400	1568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	3.0
10°-20°	314.0	8.6
20°-30°	480.1	13.1
30°-40°	586.9	16.0
40°-50°	625.6	17.1
50°-60°	598.1	16.4
60°-70°	506.7	13.9
70°-80°	340.5	9.3
80°-90°	96.1	2.6
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°	903.2	24.7
0°-40°	1490.1	40.7
0°-60°	2713.8	74.2
0°-90°	3657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1150	1148	1143	1148	1148	109
15°	1110	1110	1108	1117	1116	313
25°	1030	1034	1041	1050	1052	475
35°	914	922	936	954	958	573
45°	767	780	807	842	856	592
55°	593	615	669	722	747	528
65°	392	432	521	590	617	389
75°	185	252	352	412	424	198
85°	36	74	91	98	102	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1150.0	1150.0	1150.0	1150.0	1150.0
2.5°	1151.8	1151.8	1146.4	1150.0	1150.0
5°	1150.0	1148.2	1142.8	1148.2	1148.2
7.5°	1144.6	1142.8	1139.1	1144.6	1142.8
10°	1133.7	1133.7	1130.1	1135.5	1135.5
12.5°	1124.6	1122.8	1121.0	1128.3	1126.4
15°	1110.1	1110.1	1108.3	1117.4	1115.6
17.5°	1092.0	1093.8	1095.6	1102.9	1104.7
20°	1072.0	1075.7	1077.5	1088.3	1088.3
22.5°	1053.9	1055.7	1059.3	1070.2	1070.2
25°	1030.3	1033.9	1041.2	1050.3	1052.1
27.5°	1006.7	1008.5	1017.6	1030.3	1032.1
30°	975.9	981.3	992.2	1006.7	1008.5
32.5°	948.7	954.1	966.8	981.3	985.0
35°	914.2	921.5	936.0	954.1	957.7
37.5°	883.4	888.8	907.0	926.9	932.4
40°	845.3	856.2	874.3	897.9	907.0
42.5°	807.2	818.1	839.8	870.7	881.6
45°	767.3	780.0	807.2	841.7	856.2
47.5°	727.4	741.9	772.7	812.6	829.0
50°	682.0	700.2	738.3	783.6	801.8
52.5°	638.5	660.3	702.0	752.8	776.4
55°	593.2	614.9	669.3	721.9	747.3
57.5°	542.4	571.4	631.2	691.1	718.3
60°	495.2	522.4	595.0	660.3	687.5
62.5°	444.4	480.7	558.7	627.6	654.8
65°	391.8	431.7	520.6	589.5	616.7
67.5°	344.6	388.2	482.5	551.4	578.6
70°	288.4	342.8	440.8	509.7	536.9
72.5°	235.8	295.7	397.2	464.4	489.8
75°	185.0	252.1	351.9	411.8	424.5
77.5°	137.9	208.6	304.7	330.1	321.1
80°	98.0	166.9	237.6	224.9	230.4
82.5°	63.5	127.0	146.9	166.9	172.3
85°	36.3	74.4	90.7	98.0	101.6
87.5°	16.3	27.2	36.3	36.3	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)