

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: P295052

Luminaire Tested: **24CZ2-55HE-HRP-UNV-L935-CD1-U**

Issue Date: 12/2/2019

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: P295052
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-HRP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (224) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3654.6 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

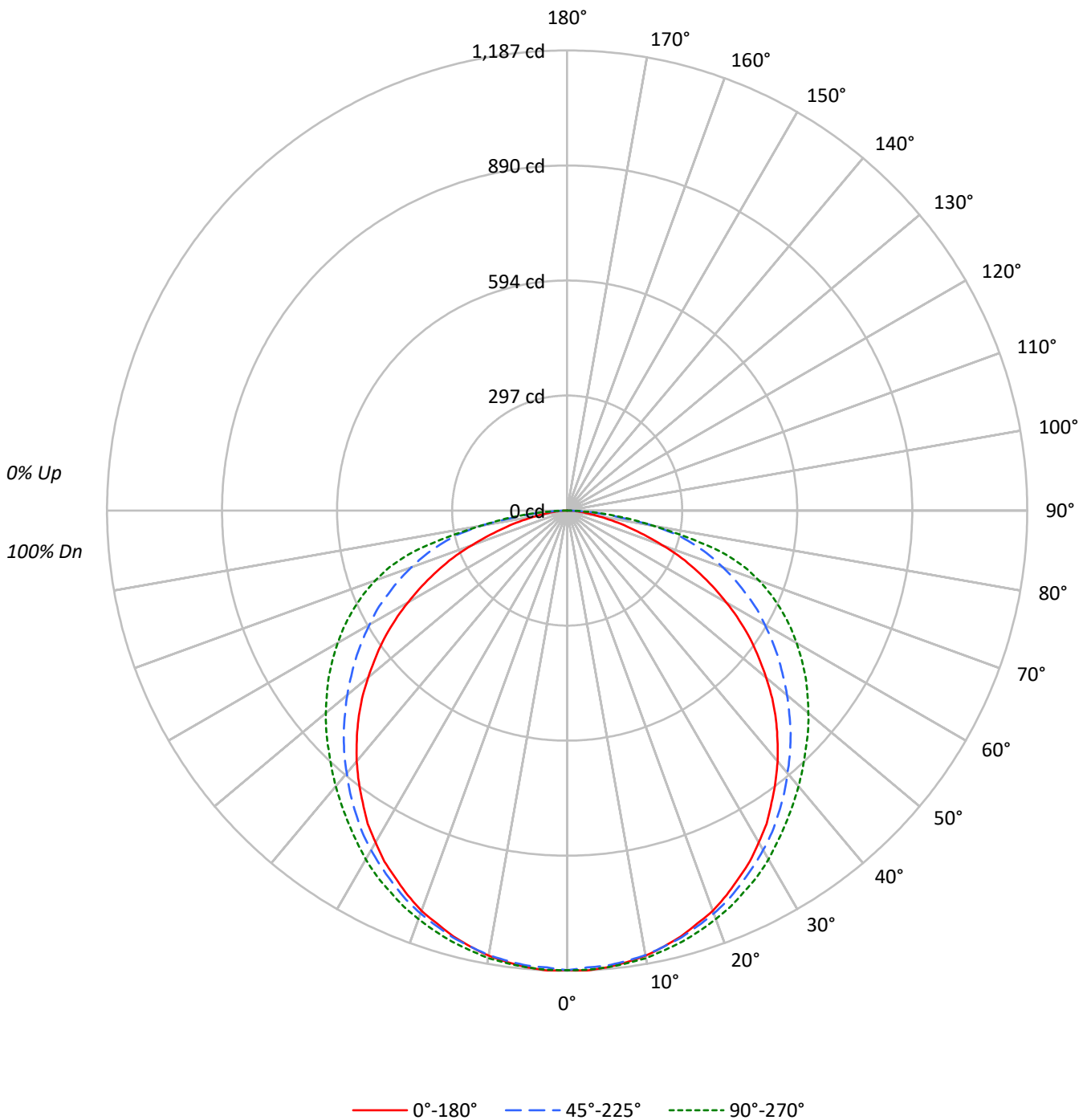
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	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	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1595	1595	1595
5°	1597	1591	1597
10°	1593	1591	1601
15°	1584	1588	1603
20°	1573	1584	1606
25°	1554	1576	1608
30°	1536	1571	1614
35°	1510	1563	1616
40°	1483	1553	1631
45°	1450	1552	1657
50°	1403	1550	1701
55°	1353	1561	1762
60°	1276	1585	1840
65°	1179	1622	1944
70°	1029	1679	2070
75°	835	1766	2140
80°	617	1731	1731
85°	472	1275	1440



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.1
10°-20°	322.6	8.8
20°-30°	491.1	13.4
30°-40°	596.3	16.3
40°-50°	629.9	17.2
50°-60°	594.4	16.3
60°-70°	494.2	13.5
70°-80°	325.2	8.9
80°-90°	88.6	2.4
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°	926.0	25.3
0°-40°	1522.2	41.7
0°-60°	2746.6	75.2
0°-90°	3654.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3654.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1183	1183	1178	1183	1183	112
15°	1137	1138	1140	1151	1151	321
25°	1046	1053	1062	1080	1083	483
35°	920	930	952	976	984	576
45°	762	777	816	855	871	587
55°	577	601	666	728	751	514
65°	370	413	510	584	610	366
75°	161	234	340	402	412	173
85°	31	67	83	92	93	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1185.7	1185.7	1185.7	1185.7	1185.7
2.5°	1187.3	1185.7	1179.6	1185.7	1185.7
5°	1182.7	1182.7	1178.1	1182.7	1182.7
7.5°	1175.0	1175.0	1172.0	1178.1	1178.1
10°	1165.9	1165.9	1164.3	1172.0	1172.0
12.5°	1152.1	1153.6	1152.1	1161.3	1161.3
15°	1136.8	1138.3	1139.8	1150.6	1150.6
17.5°	1116.9	1120.0	1123.0	1135.3	1136.8
20°	1098.5	1100.1	1106.2	1120.0	1121.5
22.5°	1074.1	1078.6	1086.3	1100.1	1104.7
25°	1046.5	1052.6	1061.8	1080.2	1083.2
27.5°	1020.5	1025.1	1037.3	1057.2	1063.3
30°	988.4	996.0	1011.3	1031.2	1038.9
32.5°	957.8	965.4	983.8	1005.2	1011.3
35°	919.5	930.2	951.7	976.1	983.8
37.5°	882.8	893.5	919.5	947.1	956.2
40°	844.6	856.8	884.3	916.5	928.7
42.5°	803.2	820.1	850.7	885.9	899.6
45°	761.9	777.2	815.5	855.3	870.6
47.5°	717.6	735.9	777.2	824.7	843.0
50°	670.1	693.1	740.5	792.5	812.4
52.5°	622.7	648.7	702.3	760.4	781.8
55°	576.8	601.3	665.5	728.3	751.2
57.5°	526.3	556.9	627.3	694.6	717.6
60°	474.3	508.0	589.0	659.4	683.9
62.5°	422.3	460.5	552.3	622.7	648.7
65°	370.3	413.1	509.5	584.5	610.5
67.5°	319.8	367.2	469.7	544.7	570.7
70°	261.6	321.3	426.9	500.3	526.3
72.5°	208.1	276.9	385.6	454.4	477.4
75°	160.6	234.1	339.7	402.4	411.6
77.5°	117.8	191.2	292.2	313.6	315.2
80°	79.6	153.0	223.4	220.3	223.4
82.5°	52.0	114.7	140.8	157.6	159.1
85°	30.6	67.3	82.6	91.8	93.3
87.5°	15.3	22.9	29.1	30.6	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)