

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: P473820

Luminaire Tested: **24CZ2-35HE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473820
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35HE-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3684.9 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

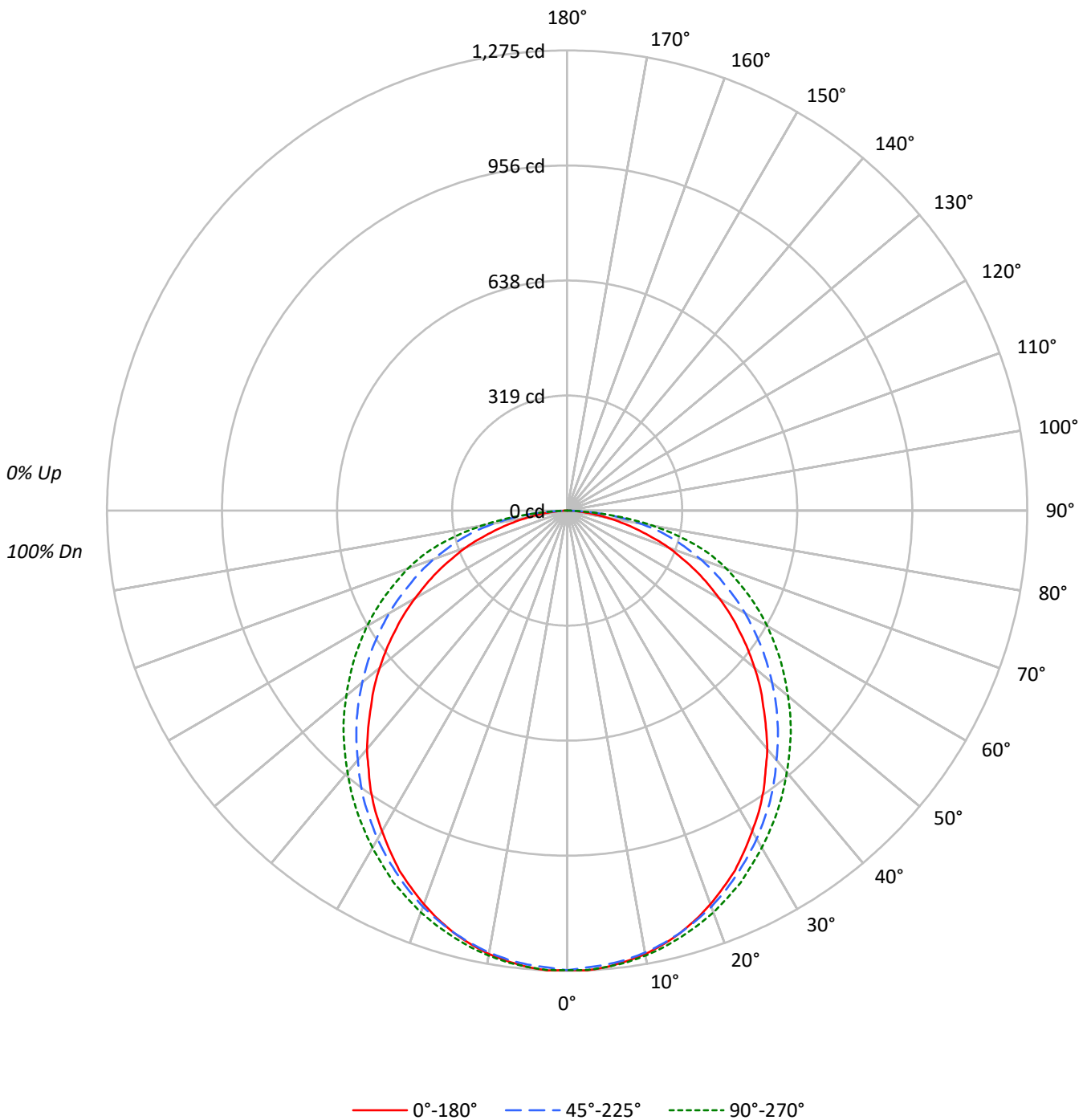
Input Watts (W): 27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1713	1713	1713
5°	1714	1705	1714
10°	1705	1699	1710
15°	1688	1687	1703
20°	1662	1672	1696
25°	1633	1652	1688
30°	1594	1632	1676
35°	1558	1611	1669
40°	1515	1585	1663
45°	1463	1569	1667
50°	1419	1551	1672
55°	1367	1540	1691
60°	1311	1533	1722
65°	1249	1528	1766
70°	1175	1543	1848
75°	1033	1575	1922
80°	862	1587	1854
85°	616	1360	1379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.3
10°-20°	342.9	9.3
20°-30°	514.4	14.0
30°-40°	614.1	16.7
40°-50°	636.1	17.3
50°-60°	585.6	15.9
60°-70°	472.4	12.8
70°-80°	308.6	8.4
80°-90°	90.5	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°	977.6	26.5
0°-40°	1591.7	43.2
0°-60°	2813.4	76.3
0°-90°	3684.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3684.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1273	1273	1273	1273	1273	
5°	1269	1268	1263	1270	1269	120
15°	1212	1212	1211	1223	1223	341
25°	1100	1102	1113	1133	1137	506
35°	948	957	981	1008	1016	592
45°	769	788	824	861	876	595
55°	583	608	657	705	721	522
65°	392	419	480	535	555	388
75°	199	236	303	355	370	212
85°	40	69	88	94	89	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.4	1273.4	1273.4	1273.4	1273.4
2.5°	1275.2	1273.4	1266.8	1274.6	1274.0
5°	1269.2	1268.0	1262.7	1269.8	1269.2
7.5°	1259.7	1259.1	1254.9	1262.7	1262.7
10°	1247.8	1246.6	1243.6	1252.5	1251.9
12.5°	1231.1	1230.5	1228.7	1239.4	1238.9
15°	1211.5	1211.5	1210.9	1222.8	1222.8
17.5°	1187.7	1188.2	1190.6	1204.3	1204.9
20°	1160.9	1163.2	1168.0	1183.5	1184.7
22.5°	1130.5	1135.3	1141.8	1159.1	1160.9
25°	1100.1	1102.5	1112.6	1132.9	1137.1
27.5°	1063.2	1069.2	1082.3	1103.1	1107.3
30°	1025.7	1034.1	1050.7	1072.2	1078.7
32.5°	988.8	996.0	1015.6	1040.0	1047.8
35°	948.3	956.7	981.1	1007.9	1016.2
37.5°	903.7	916.8	942.4	973.3	982.3
40°	862.6	874.5	902.5	937.0	946.6
42.5°	815.6	830.5	864.4	899.5	911.4
45°	769.1	788.2	824.5	861.4	876.3
47.5°	725.7	741.2	784.0	825.7	838.8
50°	678.1	695.9	741.2	785.2	798.9
52.5°	631.0	652.5	698.3	744.7	759.6
55°	582.8	607.8	656.6	704.9	720.9
57.5°	536.4	561.4	612.0	663.2	679.8
60°	487.0	513.8	569.7	619.1	640.0
62.5°	439.3	466.1	525.1	578.6	598.3
65°	392.3	419.1	479.8	534.6	554.8
67.5°	343.5	372.7	437.6	490.5	510.2
70°	298.8	326.8	392.3	448.9	469.7
72.5°	247.7	281.0	347.7	403.6	423.3
75°	198.8	236.3	303.0	355.4	369.7
77.5°	153.6	191.1	257.8	297.1	306.0
80°	111.3	149.4	204.8	232.2	239.3
82.5°	72.0	111.3	148.2	166.7	169.1
85°	39.9	69.1	88.1	93.5	89.3
87.5°	14.3	26.2	25.6	20.8	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)