

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: P474225

Luminaire Tested: **24CZ2-60HE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474225
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4142.0 lumens
Efficiency: N/A
Efficacy: 93.9 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

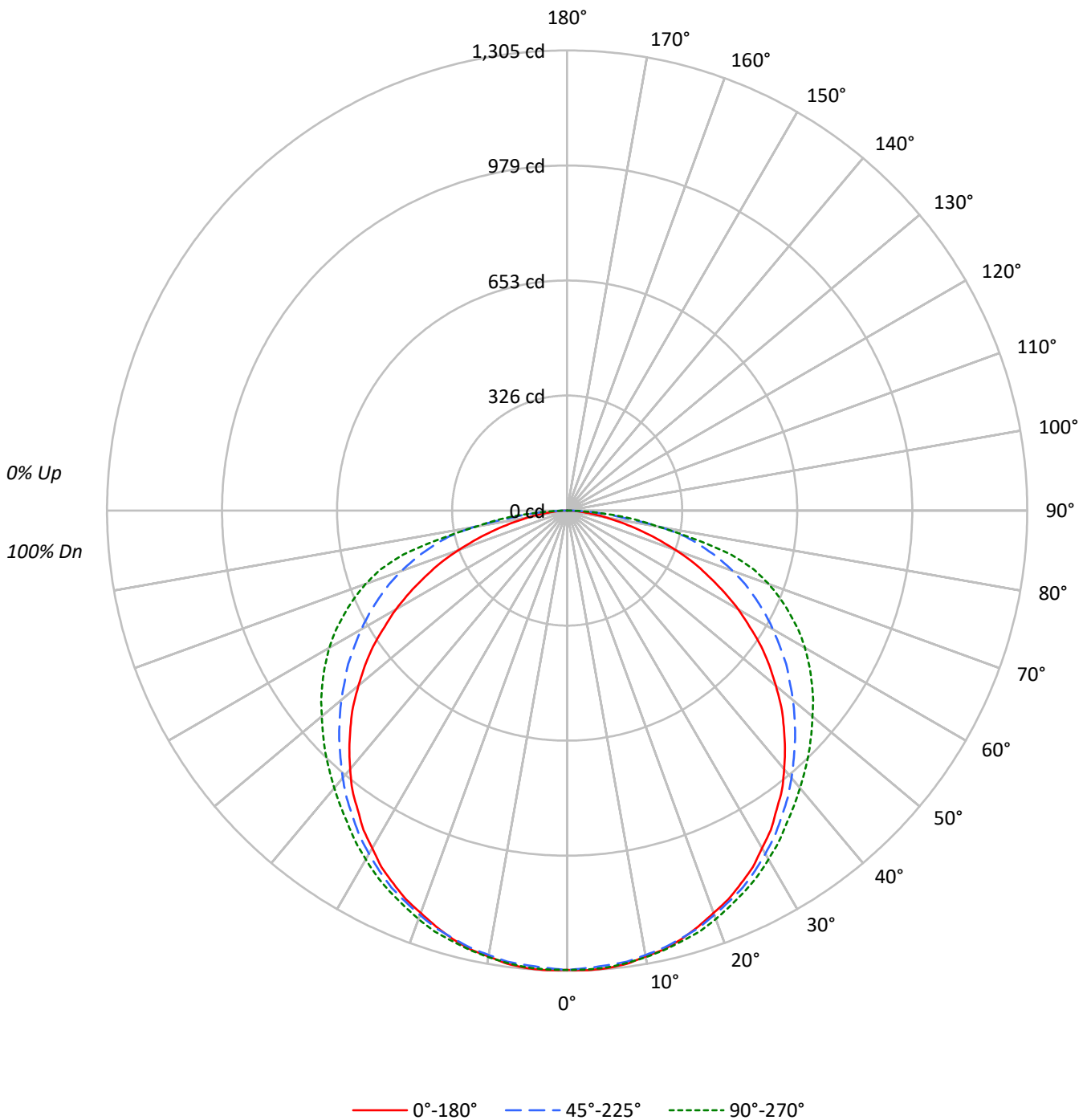
Input Watts (W): 44.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1753	1753	1753
5°	1759	1748	1756
10°	1754	1749	1757
15°	1751	1749	1760
20°	1739	1747	1765
25°	1732	1751	1769
30°	1717	1746	1775
35°	1701	1741	1782
40°	1682	1739	1804
45°	1654	1740	1845
50°	1617	1750	1901
55°	1576	1778	1986
60°	1510	1813	2095
65°	1413	1877	2224
70°	1285	1964	2392
75°	1089	2072	2499
80°	860	2085	2021
85°	634	1587	1777



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	3.0
10°-20°	355.6	8.6
20°-30°	543.8	13.1
30°-40°	664.7	16.0
40°-50°	708.5	17.1
50°-60°	677.4	16.4
60°-70°	573.8	13.9
70°-80°	385.7	9.3
80°-90°	108.8	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°	1023.0	24.7
0°-40°	1687.7	40.7
0°-60°	3073.6	74.2
0°-90°	4142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4142.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1303	1300	1294	1300	1300	124
15°	1257	1257	1255	1266	1264	355
25°	1167	1171	1179	1190	1192	538
35°	1035	1044	1060	1081	1085	649
45°	869	884	914	953	970	670
55°	672	696	758	818	846	598
65°	444	489	590	668	698	441
75°	210	286	399	466	481	224
85°	41	84	103	111	115	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.6	1302.6	1302.6	1302.6	1302.6
2.5°	1304.7	1304.7	1298.5	1302.6	1302.6
5°	1302.6	1300.5	1294.4	1300.5	1300.5
7.5°	1296.4	1294.4	1290.3	1296.4	1294.4
10°	1284.1	1284.1	1280.0	1286.2	1286.2
12.5°	1273.8	1271.8	1269.7	1277.9	1275.9
15°	1257.4	1257.4	1255.3	1265.6	1263.5
17.5°	1236.8	1238.9	1240.9	1249.2	1251.2
20°	1214.2	1218.3	1220.4	1232.7	1232.7
22.5°	1193.7	1195.7	1199.8	1212.2	1212.2
25°	1166.9	1171.0	1179.3	1189.5	1191.6
27.5°	1140.2	1142.3	1152.5	1166.9	1169.0
30°	1105.3	1111.4	1123.8	1140.2	1142.3
32.5°	1074.4	1080.6	1095.0	1111.4	1115.5
35°	1035.4	1043.6	1060.0	1080.6	1084.7
37.5°	1000.4	1006.6	1027.2	1049.8	1055.9
40°	957.5	969.6	990.2	1016.9	1027.2
42.5°	914.3	926.6	951.3	986.0	998.4
45°	869.1	883.5	914.3	953.4	969.6
47.5°	823.9	840.3	875.3	920.5	939.0
50°	772.5	793.0	836.2	887.6	908.1
52.5°	723.1	747.8	795.1	852.6	879.4
55°	671.8	696.4	758.1	817.7	846.5
57.5°	614.2	647.1	714.9	782.8	813.6
60°	561.0	591.6	673.8	747.8	778.6
62.5°	503.4	544.5	632.7	710.8	741.6
65°	443.8	489.0	589.5	667.6	698.5
67.5°	390.3	439.7	546.6	624.5	655.3
70°	326.6	388.3	499.3	577.2	608.0
72.5°	267.0	334.8	450.0	526.0	554.8
75°	209.5	285.5	398.6	466.4	480.8
77.5°	156.2	236.2	345.1	373.9	363.6
80°	111.0	189.1	269.1	254.7	260.8
82.5°	71.9	143.9	166.5	189.1	195.1
85°	41.1	84.3	102.8	111.0	115.1
87.5°	18.5	30.8	41.1	41.1	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)