

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: P474274

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474274
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3906.6 lumens
Efficiency: N/A
Efficacy: 89.8 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

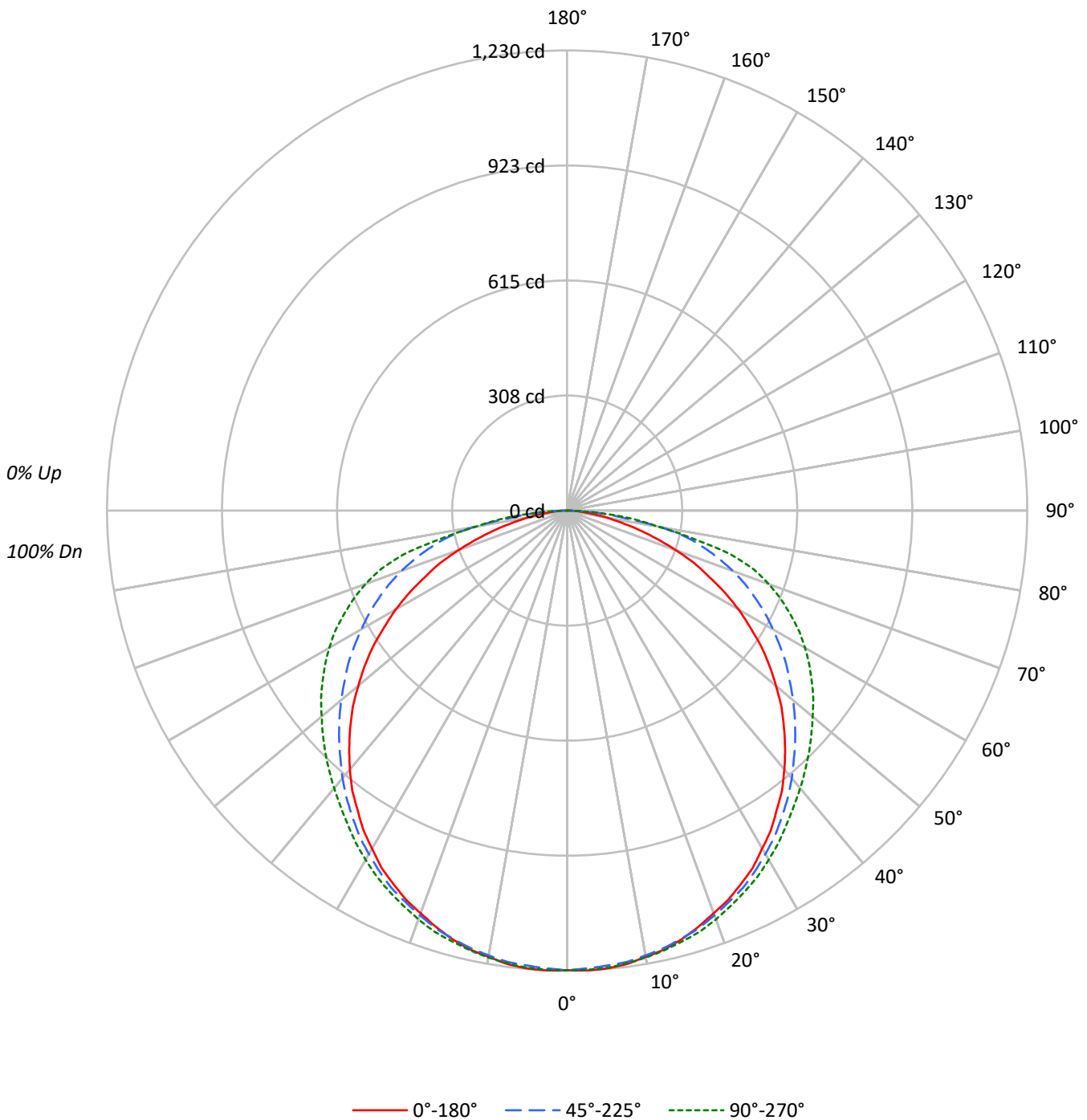
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1653	1653	1653
5°	1659	1649	1657
10°	1655	1649	1657
15°	1652	1649	1660
20°	1640	1648	1665
25°	1634	1651	1669
30°	1620	1647	1674
35°	1604	1642	1680
40°	1586	1640	1702
45°	1560	1641	1740
50°	1525	1651	1793
55°	1486	1677	1873
60°	1424	1710	1976
65°	1333	1770	2097
70°	1212	1852	2256
75°	1027	1954	2358
80°	811	1967	1906
85°	599	1496	1677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.0
10°-20°	335.4	8.6
20°-30°	512.9	13.1
30°-40°	627.0	16.0
40°-50°	668.3	17.1
50°-60°	638.9	16.4
60°-70°	541.2	13.9
70°-80°	363.8	9.3
80°-90°	102.6	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°	964.8	24.7
0°-40°	1591.8	40.7
0°-60°	2899.0	74.2
0°-90°	3906.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3906.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1229	1227	1221	1227	1227	117
15°	1186	1186	1184	1194	1192	334
25°	1101	1104	1112	1122	1124	507
35°	976	984	1000	1019	1023	612
45°	820	833	862	899	914	632
55°	634	657	715	771	798	564
65°	419	461	556	630	659	416
75°	198	269	376	440	454	212
85°	39	80	97	105	109	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1228.6	1228.6	1228.6	1228.6	1228.6
2.5°	1230.5	1230.5	1224.7	1228.6	1228.6
5°	1228.6	1226.6	1220.8	1226.6	1226.6
7.5°	1222.8	1220.8	1217.0	1222.8	1220.8
10°	1211.1	1211.1	1207.3	1213.1	1213.1
12.5°	1201.4	1199.5	1197.6	1205.3	1203.4
15°	1185.9	1185.9	1184.0	1193.7	1191.7
17.5°	1166.5	1168.5	1170.4	1178.2	1180.1
20°	1145.2	1149.1	1151.0	1162.7	1162.7
22.5°	1125.8	1127.8	1131.6	1143.3	1143.3
25°	1100.6	1104.5	1112.3	1122.0	1123.9
27.5°	1075.4	1077.4	1087.1	1100.6	1102.6
30°	1042.5	1048.3	1059.9	1075.4	1077.4
32.5°	1013.4	1019.2	1032.8	1048.3	1052.2
35°	976.5	984.3	999.8	1019.2	1023.1
37.5°	943.6	949.4	968.8	990.1	995.9
40°	903.1	914.5	933.9	959.1	968.8
42.5°	862.4	874.0	897.3	930.0	941.7
45°	819.7	833.3	862.4	899.2	914.5
47.5°	777.1	792.6	825.5	868.2	885.6
50°	728.6	748.0	788.7	837.2	856.5
52.5°	682.1	705.3	749.9	804.2	829.4
55°	633.6	656.8	715.0	771.2	798.4
57.5°	579.3	610.3	674.3	738.3	767.4
60°	529.1	558.0	635.5	705.3	734.4
62.5°	474.8	513.6	596.7	670.4	699.5
65°	418.6	461.2	556.0	629.7	658.8
67.5°	368.2	414.7	515.5	589.0	618.1
70°	308.1	366.2	470.9	544.4	573.5
72.5°	251.8	315.8	424.4	496.1	523.3
75°	197.6	269.3	375.9	439.9	453.5
77.5°	147.3	222.8	325.5	352.7	343.0
80°	104.7	178.4	253.8	240.2	246.0
82.5°	67.9	135.7	157.0	178.4	184.0
85°	38.8	79.5	96.9	104.7	108.6
87.5°	17.4	29.1	38.8	38.8	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)