

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: P474421

Luminaire Tested: **24CZ2-40HE-HRP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474421
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-HRP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3357.1 lumens
Efficiency: N/A
Efficacy: 109.4 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

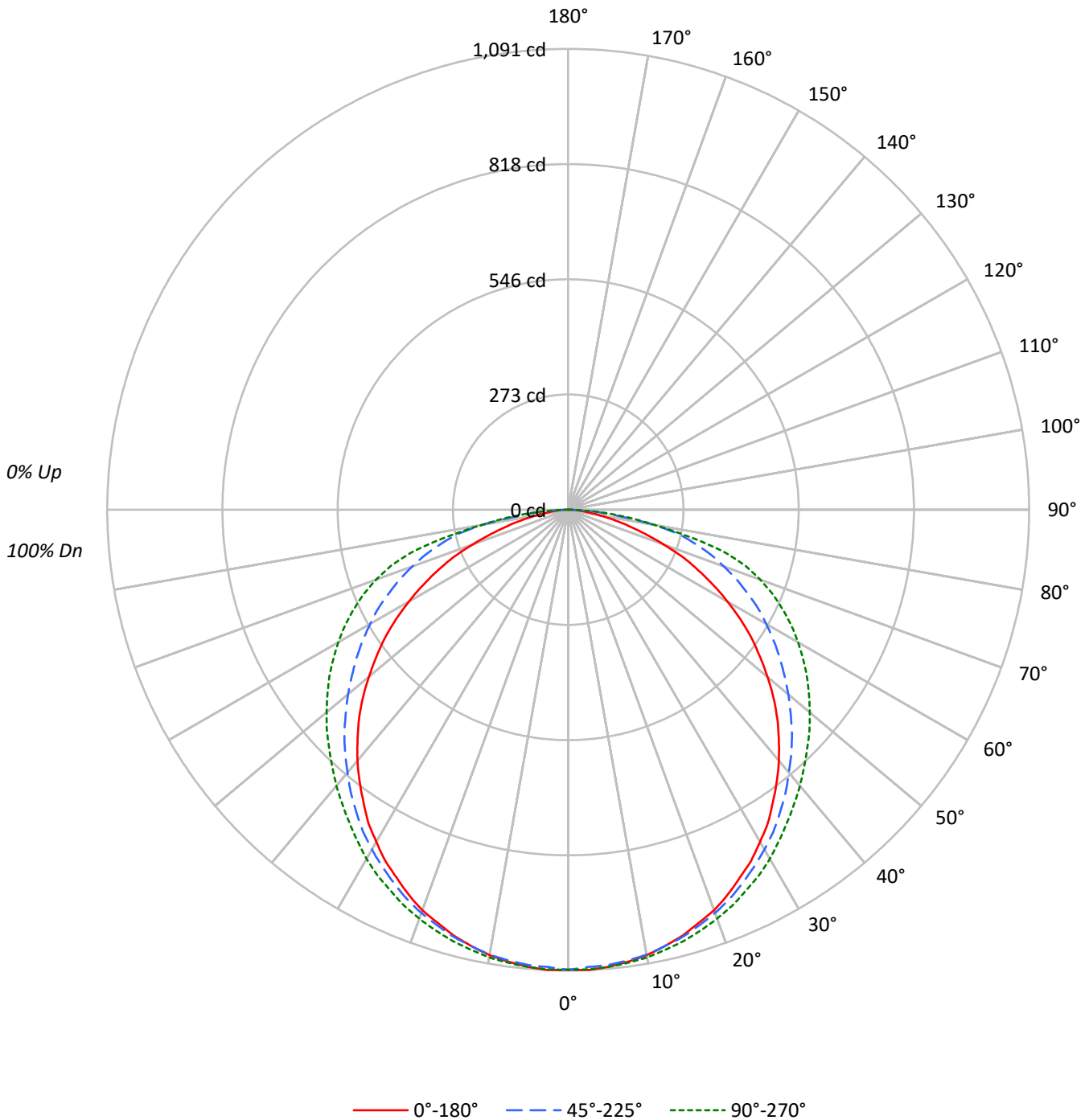
Input Watts (W): 30.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1466	1466	1466
5°	1467	1462	1467
10°	1463	1461	1471
15°	1455	1459	1472
20°	1445	1455	1475
25°	1427	1448	1477
30°	1411	1443	1483
35°	1387	1436	1484
40°	1363	1427	1498
45°	1332	1425	1522
50°	1289	1424	1562
55°	1243	1434	1619
60°	1172	1456	1690
65°	1083	1490	1785
70°	945	1543	1902
75°	767	1622	1966
80°	566	1591	1591
85°	434	1172	1323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	3.1
10°-20°	296.3	8.8
20°-30°	451.1	13.4
30°-40°	547.7	16.3
40°-50°	578.7	17.2
50°-60°	546.0	16.3
60°-70°	454.0	13.5
70°-80°	298.7	8.9
80°-90°	81.4	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°	850.6	25.3
0°-40°	1398.3	41.7
0°-60°	2523.0	75.2
0°-90°	3357.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3357.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1086	1086	1082	1086	1086	103
15°	1044	1046	1047	1057	1057	295
25°	961	967	975	992	995	443
35°	845	854	874	897	904	529
45°	700	714	749	786	800	539
55°	530	552	611	669	690	472
65°	340	380	468	537	561	336
75°	148	215	312	370	378	159
85°	28	62	76	84	86	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.2	1089.2	1089.2	1089.2	1089.2
2.5°	1090.7	1089.2	1083.6	1089.2	1089.2
5°	1086.5	1086.5	1082.1	1086.5	1086.5
7.5°	1079.4	1079.4	1076.5	1082.1	1082.1
10°	1070.9	1070.9	1069.6	1076.5	1076.5
12.5°	1058.3	1059.6	1058.3	1066.7	1066.7
15°	1044.2	1045.7	1047.1	1056.9	1056.9
17.5°	1026.0	1028.8	1031.7	1042.8	1044.2
20°	1009.2	1010.5	1016.1	1028.8	1030.2
22.5°	986.7	990.8	997.9	1010.5	1014.8
25°	961.3	966.9	975.4	992.3	995.0
27.5°	937.5	941.6	952.9	971.2	976.8
30°	907.9	915.0	929.0	947.3	954.3
32.5°	879.8	886.8	903.7	923.3	929.0
35°	844.7	854.5	874.1	896.6	903.7
37.5°	811.0	820.8	844.7	870.0	878.5
40°	775.8	787.0	812.4	841.8	853.1
42.5°	737.8	753.3	781.4	813.7	826.4
45°	699.9	714.0	749.1	785.6	799.7
47.5°	659.2	676.1	714.0	757.6	774.5
50°	615.6	636.7	680.3	728.0	746.3
52.5°	572.1	595.9	645.1	698.4	718.2
55°	529.8	552.3	611.3	669.0	690.1
57.5°	483.5	511.6	576.3	638.0	659.2
60°	435.6	466.6	541.1	605.7	628.2
62.5°	387.9	423.1	507.3	572.1	595.9
65°	340.1	379.5	468.1	536.9	560.8
67.5°	293.7	337.3	431.4	500.4	524.2
70°	240.3	295.1	392.1	459.6	483.5
72.5°	191.1	254.5	354.1	417.5	438.5
75°	147.6	215.1	312.0	369.6	378.1
77.5°	108.2	175.7	268.4	288.1	289.5
80°	73.1	140.5	205.3	202.4	205.3
82.5°	47.7	105.4	129.2	144.8	146.1
85°	28.1	61.9	75.9	84.4	85.7
87.5°	14.0	21.1	26.7	28.1	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)