

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: P275978

Luminaire Tested: **24CZ2-40HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3275.1 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

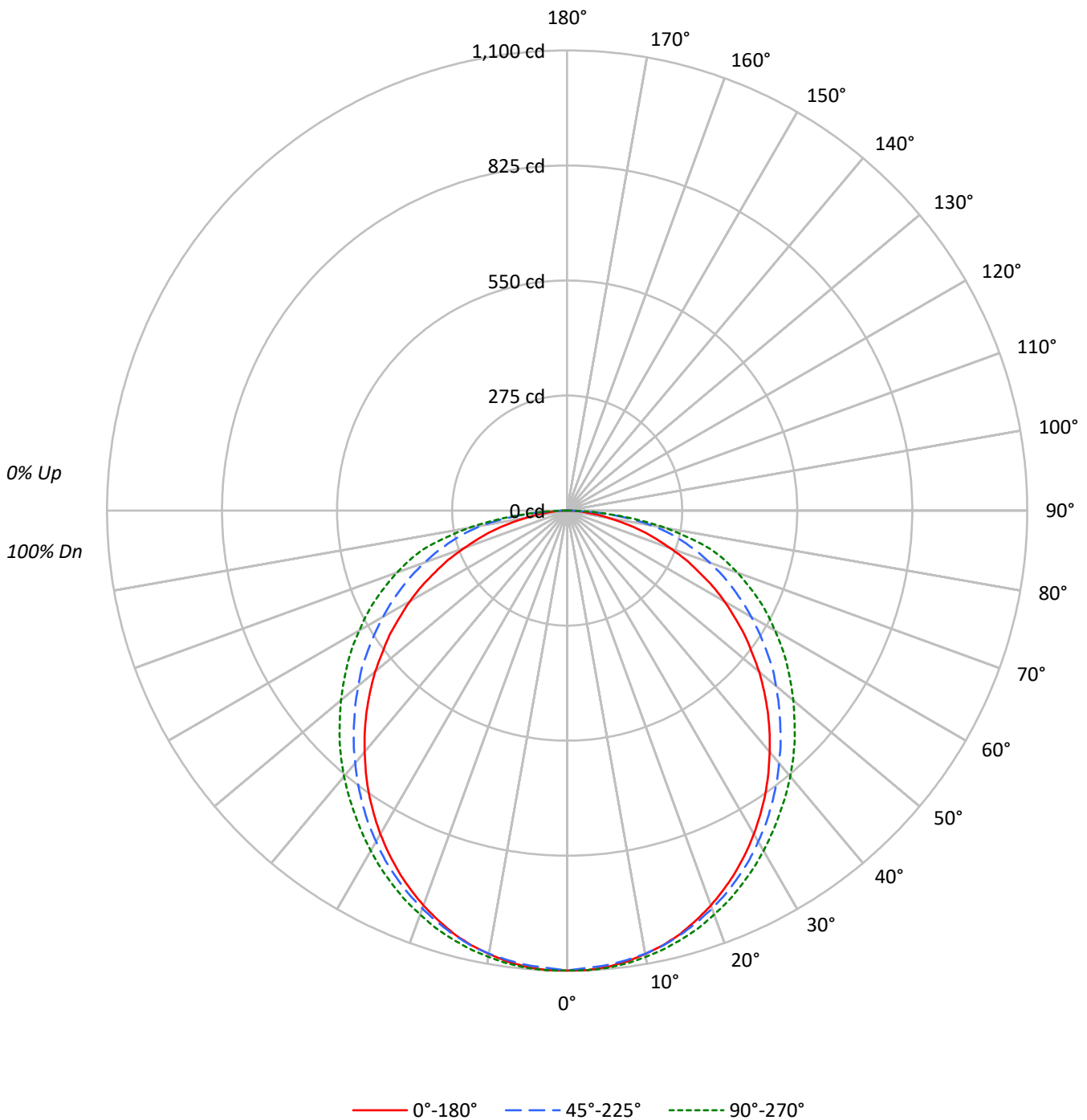
Input Watts (W): 28.809168
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	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	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1480	1480	1480
5°	1479	1473	1482
10°	1471	1470	1480
15°	1459	1462	1477
20°	1438	1449	1471
25°	1415	1436	1465
30°	1387	1420	1459
35°	1357	1402	1454
40°	1323	1384	1457
45°	1290	1371	1464
50°	1254	1364	1478
55°	1215	1361	1505
60°	1168	1368	1544
65°	1107	1388	1611
70°	1028	1423	1703
75°	938	1495	1847
80°	771	1609	1846
85°	591	1485	1585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.0	3.2
10°-20°	296.9	9.1
20°-30°	446.8	13.6
30°-40°	535.4	16.3
40°-50°	558.0	17.0
50°-60°	519.1	15.9
60°-70°	427.6	13.1
70°-80°	291.2	8.9
80°-90°	96.1	2.9
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°	847.7	25.9
0°-40°	1383.1	42.2
0°-60°	2460.2	75.1
0°-90°	3275.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3275.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1095	1095	1091	1096	1097	104
15°	1047	1048	1049	1059	1060	295
25°	953	958	967	984	987	439
35°	826	836	854	877	885	517
45°	678	692	720	756	770	523
55°	518	536	580	626	642	462
65°	348	377	436	488	506	345
75°	180	221	288	339	355	190
85°	38	74	96	103	103	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1099.6	1099.6	1099.6	1099.6	1099.6
2.5°	1099.6	1099.6	1094.1	1099.6	1099.6
5°	1095.2	1095.2	1090.9	1096.3	1097.4
7.5°	1087.6	1088.7	1084.3	1090.9	1092.0
10°	1076.6	1077.7	1075.6	1082.1	1083.2
12.5°	1063.5	1064.6	1064.6	1072.3	1073.4
15°	1047.1	1048.2	1049.3	1059.2	1060.3
17.5°	1026.4	1029.6	1031.8	1043.9	1046.0
20°	1004.5	1007.8	1012.2	1025.3	1027.5
22.5°	979.4	983.7	991.4	1005.6	1008.9
25°	953.1	957.5	967.3	983.7	987.0
27.5°	923.6	930.2	942.2	959.7	964.1
30°	893.0	899.6	913.8	932.4	938.9
32.5°	860.2	869.0	885.4	906.1	912.7
35°	826.3	836.2	853.7	876.6	885.4
37.5°	790.3	801.2	822.0	847.1	858.0
40°	753.1	766.2	788.1	817.6	829.6
42.5°	715.9	728.0	755.3	787.0	800.1
45°	677.7	691.9	720.3	756.4	769.5
47.5°	638.3	652.5	686.4	724.7	736.7
50°	599.0	613.2	651.5	691.9	706.1
52.5°	556.4	574.9	618.7	659.1	673.3
55°	518.1	535.6	580.4	626.3	641.6
57.5°	474.4	495.1	544.3	592.4	608.8
60°	433.9	455.8	508.3	557.5	573.8
62.5°	392.4	416.5	472.2	522.5	541.1
65°	347.6	377.1	436.1	487.5	506.1
67.5°	307.1	337.8	400.1	452.5	468.9
70°	261.2	298.4	361.8	414.3	432.8
72.5°	221.9	259.1	325.7	377.1	395.7
75°	180.4	220.8	287.5	338.8	355.2
77.5°	138.8	183.6	250.3	289.7	295.1
80°	99.5	146.5	207.7	230.6	238.3
82.5°	70.0	112.6	153.0	168.3	172.7
85°	38.3	74.3	96.2	102.7	102.7
87.5°	16.4	31.7	38.3	39.3	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)