

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: P275979

Luminaire Tested: **24CZ2-40HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275979
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3537.1 lumens
Efficiency: N/A
Efficacy: 121.9 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

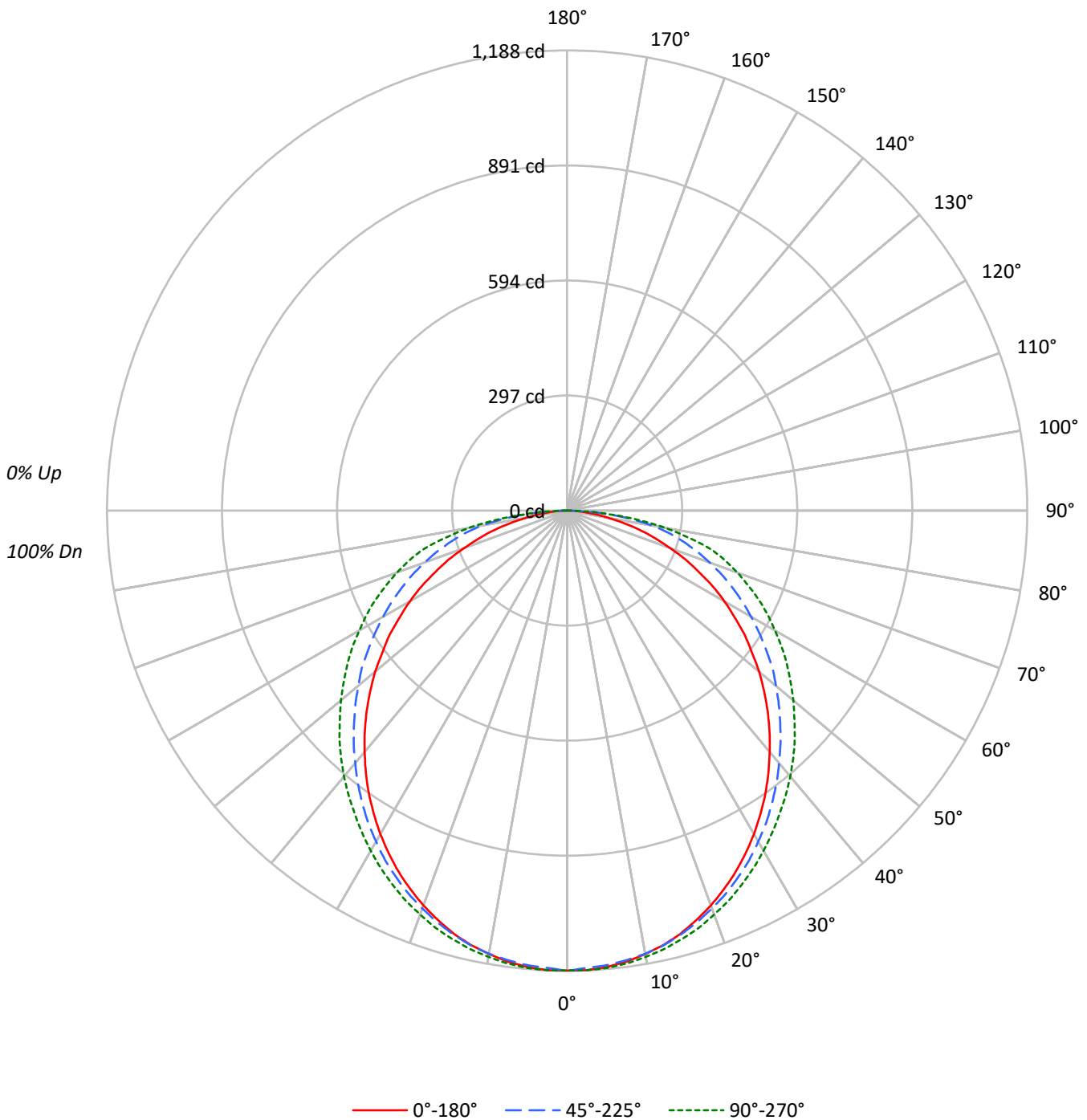
Input Watts (W): 29.007072
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1598	1598	1598
5°	1598	1591	1601
10°	1589	1587	1598
15°	1575	1579	1595
20°	1553	1565	1589
25°	1528	1551	1583
30°	1498	1533	1575
35°	1466	1514	1571
40°	1429	1495	1574
45°	1393	1480	1581
50°	1354	1473	1596
55°	1313	1470	1625
60°	1261	1477	1668
65°	1195	1500	1740
70°	1110	1537	1839
75°	1013	1614	1995
80°	832	1738	1994
85°	638	1604	1714



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.2
10°-20°	320.7	9.1
20°-30°	482.5	13.6
30°-40°	578.3	16.3
40°-50°	602.6	17.0
50°-60°	560.7	15.9
60°-70°	461.8	13.1
70°-80°	314.5	8.9
80°-90°	103.8	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°	915.5	25.9
0°-40°	1493.8	42.2
0°-60°	2657.0	75.1
0°-90°	3537.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3537.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1183	1183	1178	1184	1185	112
15°	1131	1132	1133	1144	1145	319
25°	1029	1034	1045	1062	1066	474
35°	892	903	922	947	956	558
45°	732	747	778	817	831	564
55°	560	578	627	676	693	499
65°	375	407	471	526	547	373
75°	195	238	310	366	384	205
85°	41	80	104	111	111	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1187.6	1187.6	1187.6	1187.6	1187.6
2.5°	1187.6	1187.6	1181.7	1187.6	1187.6
5°	1182.8	1182.8	1178.1	1184.0	1185.2
7.5°	1174.6	1175.8	1171.0	1178.1	1179.3
10°	1162.8	1164.0	1161.6	1168.7	1169.9
12.5°	1148.6	1149.8	1149.8	1158.1	1159.2
15°	1130.9	1132.1	1133.3	1143.9	1145.1
17.5°	1108.5	1112.0	1114.4	1127.4	1129.7
20°	1084.9	1088.4	1093.1	1107.3	1109.7
22.5°	1057.7	1062.4	1070.7	1086.0	1089.6
25°	1029.4	1034.1	1044.7	1062.4	1066.0
27.5°	997.5	1004.6	1017.6	1036.5	1041.2
30°	964.5	971.5	986.9	1007.0	1014.0
32.5°	929.0	938.5	956.2	978.6	985.7
35°	892.4	903.1	922.0	946.8	956.2
37.5°	853.5	865.3	887.7	914.9	926.7
40°	813.4	827.5	851.1	883.0	896.0
42.5°	773.2	786.2	815.7	850.0	864.1
45°	731.9	747.2	777.9	816.9	831.1
47.5°	689.4	704.8	741.3	782.7	795.6
50°	646.9	662.3	703.6	747.2	762.6
52.5°	600.9	620.9	668.2	711.8	727.2
55°	559.6	578.4	626.8	676.4	692.9
57.5°	512.3	534.8	587.9	639.8	657.5
60°	468.7	492.3	548.9	602.0	619.8
62.5°	423.8	449.8	510.0	564.3	584.3
65°	375.4	407.3	471.0	526.5	546.6
67.5°	331.7	364.8	432.1	488.7	506.4
70°	282.1	322.3	390.7	447.4	467.5
72.5°	239.6	279.8	351.8	407.3	427.3
75°	194.8	238.5	310.5	366.0	383.7
77.5°	149.9	198.3	270.3	312.8	318.7
80°	107.4	158.2	224.3	249.1	257.3
82.5°	75.6	121.6	165.3	181.8	186.5
85°	41.3	80.3	103.9	111.0	111.0
87.5°	17.7	34.2	41.3	42.5	43.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)