

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: P276193

Luminaire Tested: **24CZ2-35HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276193  
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: 24CZ2-35HE-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3137.9 lumens  
Efficiency: N/A  
Efficacy: 125.9 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

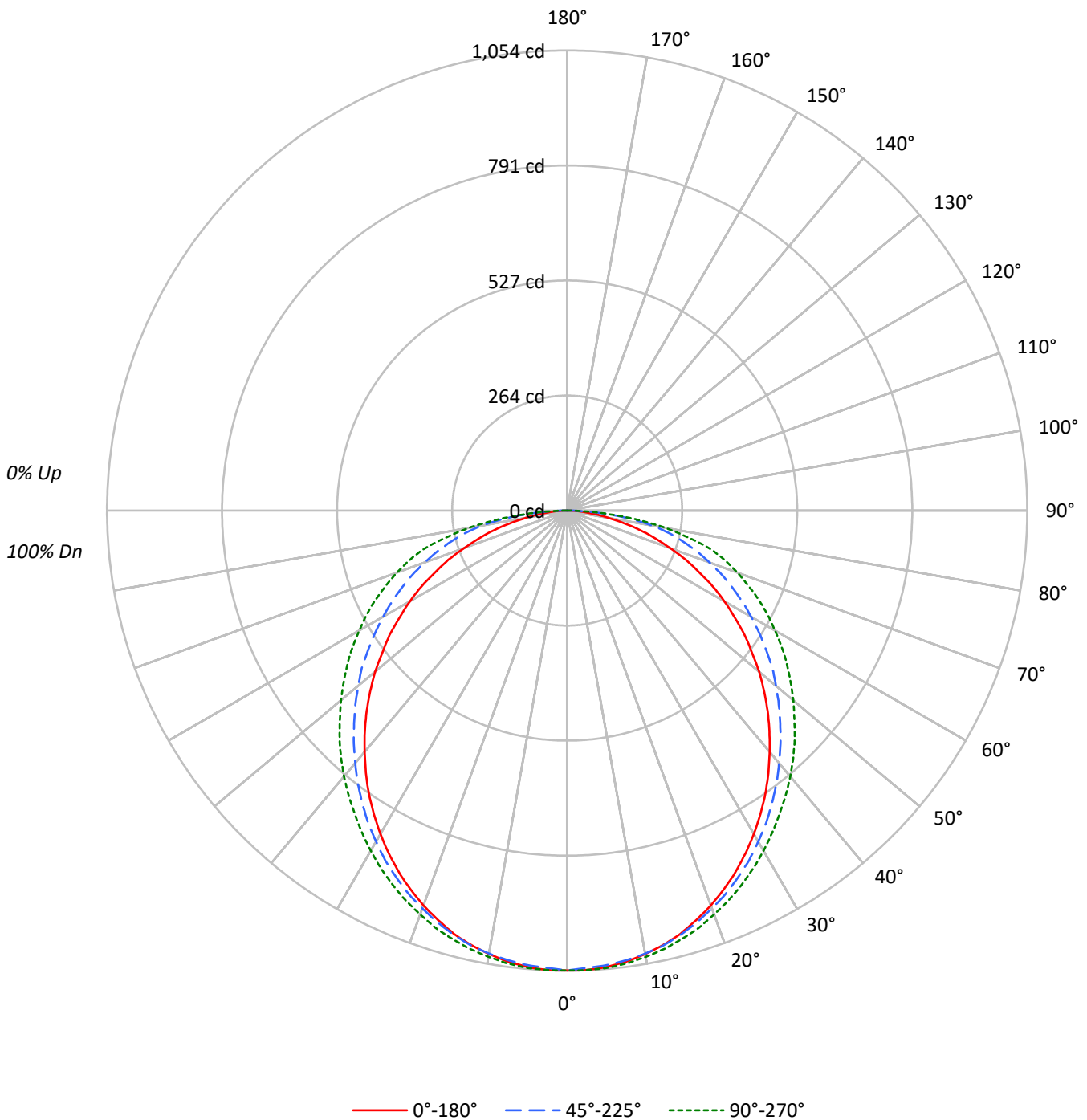
Input Watts (W): 24.924  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1417	1417	1417
5°	1417	1412	1420
10°	1409	1408	1418
15°	1398	1400	1415
20°	1378	1389	1410
25°	1356	1376	1404
30°	1329	1360	1398
35°	1300	1343	1393
40°	1267	1326	1396
45°	1235	1313	1403
50°	1201	1307	1416
55°	1164	1304	1442
60°	1119	1311	1480
65°	1060	1330	1544
70°	985	1364	1631
75°	898	1432	1770
80°	738	1542	1769
85°	567	1423	1519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.6	3.2
10°-20°	284.5	9.1
20°-30°	428.1	13.6
30°-40°	513.0	16.3
40°-50°	534.6	17.0
50°-60°	497.4	15.9
60°-70°	409.7	13.1
70°-80°	279.0	8.9
80°-90°	92.1	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°	812.2	25.9
0°-40°	1325.2	42.2
0°-60°	2357.1	75.1
0°-90°	3137.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1049	1049	1045	1050	1051	100
15°	1003	1004	1005	1015	1016	283
25°	913	917	927	942	946	420
35°	792	801	818	840	848	495
45°	649	663	690	725	737	501
55°	496	513	556	600	615	442
65°	333	361	418	467	485	331
75°	173	212	275	325	340	182
85°	37	71	92	98	98	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1053.5	1053.5	1053.5	1053.5	1053.5
2.5°	1053.5	1053.5	1048.3	1053.5	1053.5
5°	1049.3	1049.3	1045.2	1050.4	1051.4
7.5°	1042.0	1043.1	1038.9	1045.2	1046.2
10°	1031.5	1032.6	1030.5	1036.8	1037.8
12.5°	1019.0	1020.0	1020.0	1027.4	1028.4
15°	1003.3	1004.3	1005.4	1014.8	1015.8
17.5°	983.4	986.5	988.6	1000.1	1002.2
20°	962.4	965.6	969.8	982.3	984.4
22.5°	938.3	942.5	949.9	963.5	966.6
25°	913.2	917.4	926.8	942.5	945.7
27.5°	884.9	891.2	902.7	919.5	923.7
30°	855.6	861.9	875.5	893.3	899.6
32.5°	824.2	832.6	848.3	868.2	874.5
35°	791.7	801.1	817.9	839.9	848.3
37.5°	757.2	767.6	787.5	811.6	822.1
40°	721.6	734.1	755.1	783.3	794.9
42.5°	685.9	697.5	723.6	754.0	766.6
45°	649.3	662.9	690.1	724.7	737.3
47.5°	611.6	625.2	657.7	694.3	705.8
50°	573.9	587.5	624.2	662.9	676.5
52.5°	533.0	550.9	592.7	631.5	645.1
55°	496.4	513.2	556.1	600.1	614.7
57.5°	454.5	474.4	521.5	567.6	583.3
60°	415.8	436.7	487.0	534.1	549.8
62.5°	376.0	399.0	452.4	500.6	518.4
65°	333.0	361.3	417.9	467.1	484.9
67.5°	294.3	323.6	383.3	433.6	449.3
70°	250.3	285.9	346.6	396.9	414.7
72.5°	212.6	248.2	312.1	361.3	379.1
75°	172.8	211.5	275.4	324.6	340.4
77.5°	133.0	175.9	239.8	277.5	282.8
80°	95.3	140.3	199.0	221.0	228.3
82.5°	67.0	107.9	146.6	161.3	165.5
85°	36.7	71.2	92.2	98.4	98.4
87.5°	15.7	30.4	36.7	37.7	38.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)