

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: P261056

Luminaire Tested: **24CZ-LD5-35-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35-S-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3352.5 lumens  
Efficiency: N/A  
Efficacy: 133.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

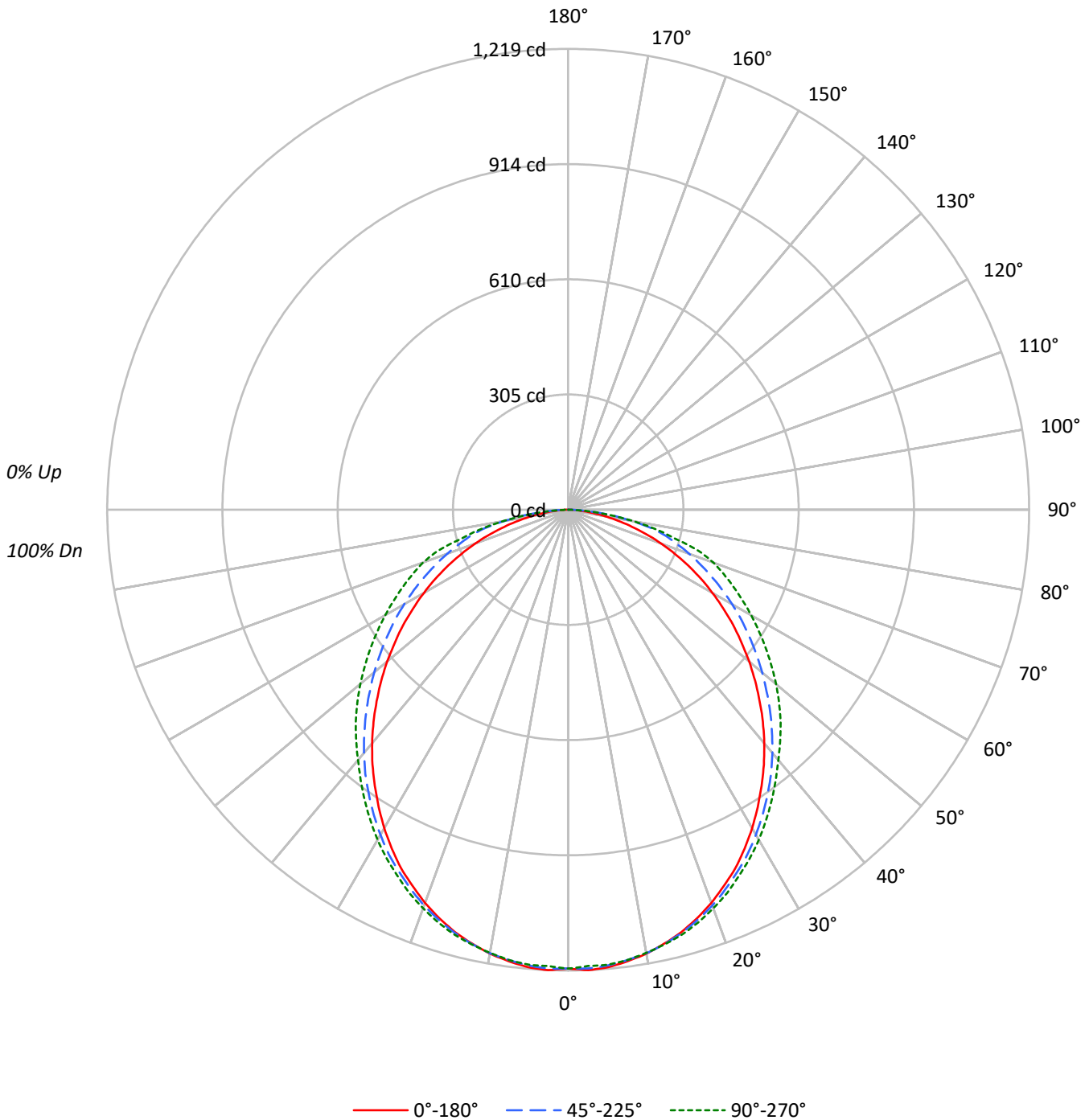
Input Watts (W): 25.19556  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1633	1633	1633
5°	1641	1635	1632
10°	1629	1628	1626
15°	1611	1614	1621
20°	1584	1596	1607
25°	1553	1570	1586
30°	1511	1542	1567
35°	1464	1510	1541
40°	1417	1475	1518
45°	1363	1437	1511
50°	1308	1401	1501
55°	1251	1371	1497
60°	1186	1348	1504
65°	1115	1332	1534
70°	1027	1338	1606
75°	910	1386	1496
80°	761	1314	1348
85°	568	1050	965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.7	3.4
10°-20°	326.3	9.7
20°-30°	486.3	14.5
30°-40°	572.5	17.1
40°-50°	581.8	17.4
50°-60°	523.1	15.6
60°-70°	413.2	12.3
70°-80°	262.2	7.8
80°-90°	72.4	2.2
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°	927.4	27.7
0°-40°	1499.9	44.7
0°-60°	2604.7	77.7
0°-90°	3352.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3352.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1215	1205	1210	1208	1208	115
15°	1157	1151	1159	1162	1164	326
25°	1046	1045	1058	1064	1069	481
35°	891	897	919	929	938	558
45°	716	726	755	778	794	553
55°	533	547	584	622	638	476
65°	350	368	418	464	482	347
75°	175	205	267	290	288	186
85°	37	64	68	62	62	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1213.7	1213.7	1213.7	1213.7	1213.7
2.5°	1219.2	1210.3	1214.8	1212.5	1208.1
5°	1214.8	1204.7	1210.3	1208.1	1208.1
7.5°	1204.7	1196.9	1201.4	1200.3	1201.4
10°	1192.5	1184.7	1191.3	1191.3	1190.2
12.5°	1175.7	1169.0	1176.8	1176.8	1178.0
15°	1156.8	1151.2	1159.0	1162.3	1163.5
17.5°	1133.3	1127.8	1137.8	1141.2	1144.5
20°	1106.6	1104.3	1114.4	1117.7	1122.2
22.5°	1076.5	1076.5	1086.5	1091.0	1097.6
25°	1046.3	1045.2	1057.5	1064.2	1068.6
27.5°	1010.6	1011.8	1027.4	1034.1	1039.6
30°	972.7	974.9	992.8	1000.6	1008.4
32.5°	932.6	937.0	957.1	966.0	973.8
35°	891.3	896.9	919.2	929.2	938.1
37.5°	850.0	857.8	881.2	891.3	901.3
40°	806.5	813.2	840.0	852.2	864.5
42.5°	761.9	770.8	797.6	815.4	829.9
45°	716.1	726.2	755.2	777.5	794.2
47.5°	670.4	683.8	711.7	741.8	756.3
50°	624.7	638.1	669.3	702.8	717.3
52.5°	577.8	591.2	626.9	661.5	677.1
55°	533.2	546.6	584.5	622.4	638.1
57.5°	486.4	500.9	543.2	582.3	597.9
60°	440.6	455.1	500.9	542.1	558.9
62.5°	396.0	411.6	459.6	503.1	519.8
65°	350.3	368.1	418.3	464.0	481.9
67.5°	305.6	325.7	378.2	426.1	445.1
70°	261.0	284.5	340.2	389.3	408.3
72.5°	217.5	243.2	302.3	351.4	361.4
75°	175.1	205.3	266.6	290.0	287.8
77.5°	135.0	168.4	226.4	230.9	237.6
80°	98.2	135.0	169.6	178.5	174.0
82.5°	64.7	101.5	121.6	117.1	116.0
85°	36.8	63.6	68.0	62.5	62.5
87.5°	15.6	25.7	22.3	16.7	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)