

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: P230482

Luminaire Tested: **24CZ-LD5-55-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-RDP-UNV-L940-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3197.7 lumens  
Efficiency: N/A  
Efficacy: 69.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

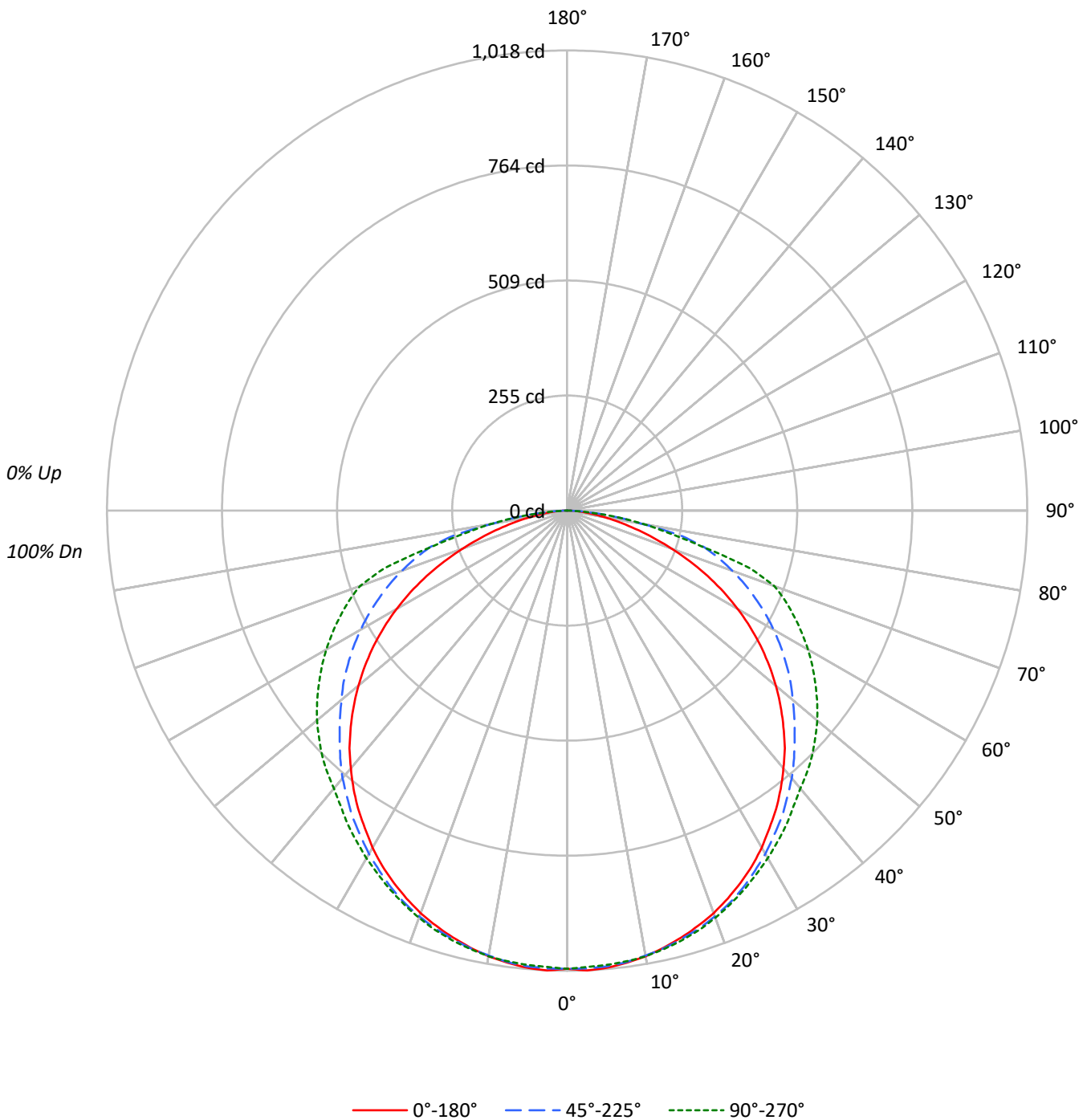
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1364	1364	1364
5°	1371	1367	1363
10°	1368	1366	1368
15°	1362	1366	1370
20°	1357	1368	1373
25°	1348	1367	1374
30°	1338	1362	1379
35°	1324	1360	1391
40°	1308	1358	1410
45°	1288	1354	1459
50°	1262	1364	1512
55°	1226	1388	1573
60°	1173	1419	1656
65°	1092	1463	1764
70°	966	1530	1920
75°	810	1637	1612
80°	646	1292	1341
85°	511	875	801



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.1	3.0
10°-20°	276.7	8.7
20°-30°	422.6	13.2
30°-40°	516.7	16.2
40°-50°	553.1	17.3
50°-60°	530.5	16.6
60°-70°	447.9	14.0
70°-80°	286.3	9.0
80°-90°	67.7	2.1
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°	795.5	24.9
0°-40°	1312.2	41.0
0°-60°	2395.8	74.9
0°-90°	3197.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3197.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	1015	1009	1012	1010	1009	96
15°	978	974	981	984	984	276
25°	908	907	921	924	926	419
35°	806	812	828	839	847	504
45°	677	688	712	744	767	522
55°	523	540	592	645	670	466
65°	343	376	460	524	554	338
75°	156	222	315	321	310	168
85°	33	55	57	55	52	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1013.7	1013.7	1013.7	1013.7	1013.7
2.5°	1018.4	1012.1	1013.7	1013.7	1010.5
5°	1015.3	1009.0	1012.1	1010.5	1009.0
7.5°	1009.0	1004.2	1007.4	1007.4	1005.8
10°	1001.1	996.4	999.5	1001.1	1001.1
12.5°	990.1	986.9	991.7	991.7	993.2
15°	977.5	974.3	980.6	983.8	983.8
17.5°	963.3	961.7	969.6	971.2	972.8
20°	947.6	946.0	955.5	955.5	958.6
22.5°	928.7	927.1	939.7	939.7	942.9
25°	908.2	906.7	920.8	924.0	925.5
27.5°	886.2	884.6	898.8	903.5	906.7
30°	861.0	861.0	876.7	883.0	887.8
32.5°	832.7	837.4	851.6	861.0	867.3
35°	805.9	812.2	828.0	839.0	846.8
37.5°	776.0	782.3	799.6	813.8	823.2
40°	744.5	752.4	772.9	788.6	802.8
42.5°	713.0	720.9	743.0	766.6	785.5
45°	676.8	687.9	711.5	744.5	766.6
47.5°	640.6	651.7	681.6	722.5	744.5
50°	602.9	615.5	651.7	698.9	722.5
52.5°	563.5	577.7	623.3	673.7	697.3
55°	522.6	539.9	591.8	645.4	670.5
57.5°	480.1	499.0	560.4	617.0	643.8
60°	436.0	459.6	527.3	587.1	615.5
62.5°	390.4	418.7	494.3	555.6	585.5
65°	343.1	376.2	459.6	524.2	554.1
67.5°	294.3	338.4	425.0	492.7	522.6
70°	245.6	297.5	388.8	458.0	488.0
72.5°	199.9	259.7	352.6	417.1	423.4
75°	155.8	221.9	314.8	321.1	310.1
77.5°	116.5	184.2	259.7	231.4	229.8
80°	83.4	148.0	166.8	171.6	173.1
82.5°	55.1	111.8	108.6	111.8	110.2
85°	33.1	55.1	56.7	55.1	51.9
87.5°	15.7	20.5	15.7	14.2	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)