

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: P230586

Luminaire Tested: **22CZ-LD5-29-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-29-S-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2609.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

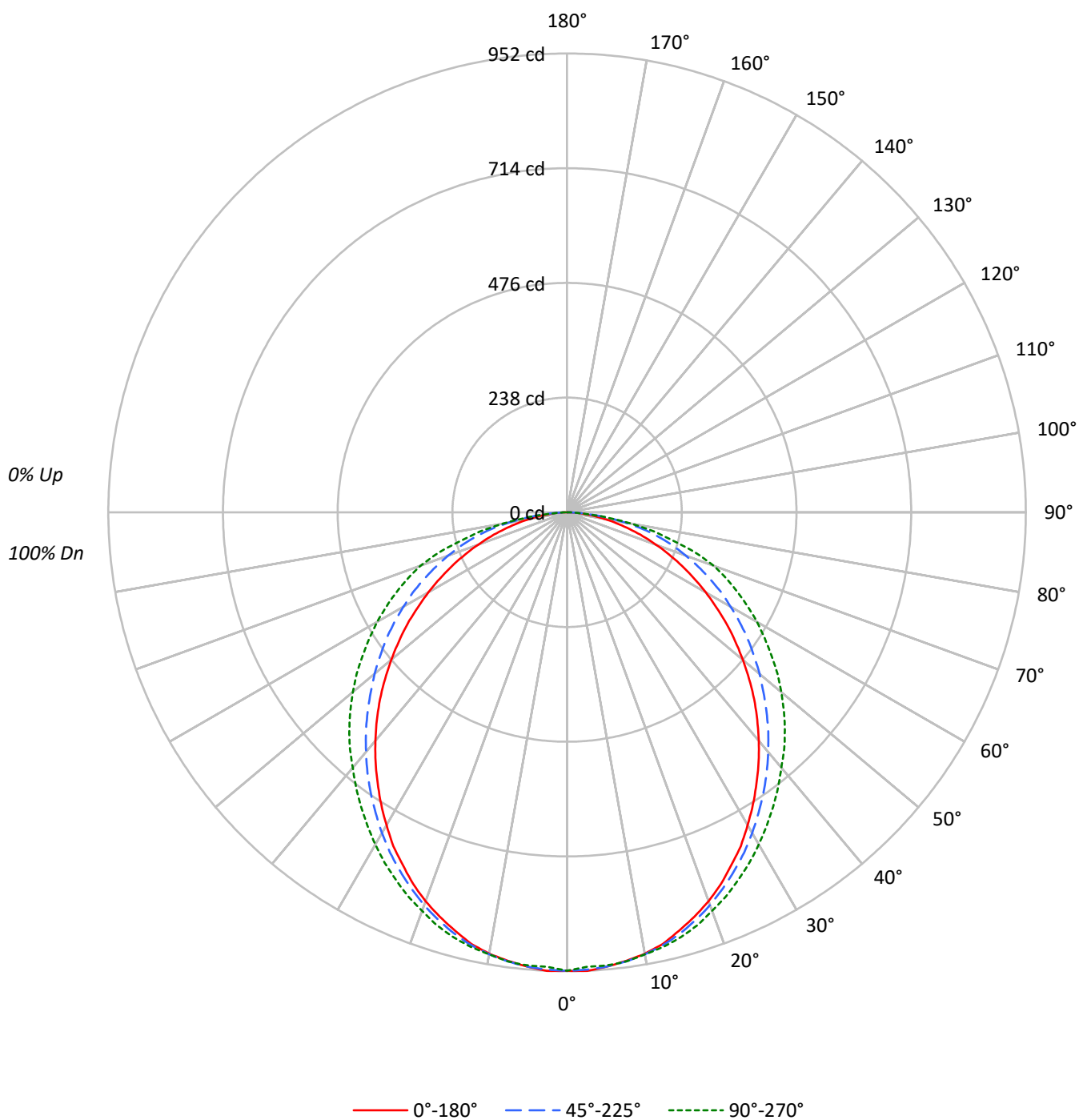
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230586

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230586

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2559	2559	2559
5°	2556	2556	2549
10°	2541	2544	2544
15°	2503	2521	2542
20°	2458	2483	2519
25°	2396	2437	2497
30°	2329	2387	2472
35°	2252	2334	2449
40°	2175	2280	2430
45°	2089	2227	2432
50°	1994	2182	2429
55°	1899	2146	2428
60°	1787	2111	2448
65°	1676	2083	2481
70°	1548	2061	2544
75°	1394	2045	2358
80°	1223	1903	2058
85°	1007	1433	1278



TEST NUMBER: P230586

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	3.4
10°-20°	255.2	9.8
20°-30°	379.0	14.5
30°-40°	446.1	17.1
40°-50°	454.8	17.4
50°-60°	410.2	15.7
60°-70°	323.1	12.4
70°-80°	199.3	7.6
80°-90°	51.7	2.0
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°	723.9	27.7
0°-40°	1170.0	44.8
0°-60°	2034.9	78.0
0°-90°	2609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2609.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	946	947	946	945	944	90
15°	898	902	905	910	912	253
25°	807	812	821	835	841	372
35°	686	693	710	733	746	429
45°	549	558	585	620	639	423
55°	405	418	457	499	518	361
65°	263	282	327	368	390	261
75°	134	157	197	219	227	143
85°	33	41	46	44	41	38
90°	0	0	0	0	0	



TEST NUMBER: P230586

CATALOG NUMBER: 22CZ-LD5-29-S-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	951.1	951.1	951.1	951.1	951.1
2.5°	952.4	952.4	949.9	947.4	943.6
5°	946.1	947.4	946.1	944.9	943.6
7.5°	938.6	939.9	939.9	939.9	939.9
10°	929.8	931.1	931.1	931.1	931.1
12.5°	917.3	918.6	919.8	921.1	923.6
15°	898.5	902.3	904.8	909.8	912.3
17.5°	879.7	883.5	887.2	893.5	898.5
20°	858.4	860.9	867.2	874.7	879.7
22.5°	834.6	838.4	844.6	854.6	862.2
25°	807.0	812.0	820.8	834.6	840.9
27.5°	780.7	784.5	795.7	810.8	819.6
30°	749.4	754.4	768.2	787.0	795.7
32.5°	718.1	724.3	739.4	760.7	770.7
35°	685.5	693.0	710.5	733.1	745.6
37.5°	652.9	660.4	680.5	705.5	719.3
40°	619.1	626.6	649.1	676.7	691.7
42.5°	584.0	592.7	617.8	649.1	666.7
45°	548.9	557.6	585.2	620.3	639.1
47.5°	512.5	522.6	552.6	591.5	610.3
50°	476.2	487.5	521.3	561.4	580.2
52.5°	439.9	452.4	488.7	530.1	550.1
55°	404.8	418.5	457.4	498.8	517.5
57.5°	367.2	383.5	424.8	464.9	486.2
60°	332.1	349.6	392.2	432.3	454.9
62.5°	297.0	315.8	360.9	401.0	422.3
65°	263.2	282.0	327.1	368.4	389.7
67.5°	229.3	250.6	294.5	335.8	357.1
70°	196.7	219.3	261.9	302.0	323.3
72.5°	165.4	188.0	230.6	268.2	280.7
75°	134.1	156.6	196.7	219.3	226.8
77.5°	105.3	126.6	161.7	175.4	185.5
80°	78.9	97.7	122.8	131.6	132.8
82.5°	53.9	70.2	85.2	86.5	85.2
85°	32.6	41.4	46.4	43.9	41.4
87.5°	15.0	16.3	15.0	10.0	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)