Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: iO LED

Report Number: P592026

Luminaire Tested: **GRZ-10L-930-30x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Report Generated By 670245626 / DESKTOP-25HFRC3

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P592026
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2111-457-21)
Test Lab:	INNOVATION CENTER
Issue Date:	2/2/2022
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	iO LED
Catalog Number:	GRZ-10L-930-30x60-X-UNV-STD-2F
Description:	iO LED GRAZER WITH 30x60 OPTIC
	1000 LUMENS PER FOOT, 2 FOOT FIXTURE
	SUMULATED RESULTS
Light Source:	3000K CCT, 90 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1827.0 lumens
Efficiency:	N/A
Efficacy:	95.7 lumens/watt
Spacing Criteria (0/90/45):	0.53 / 1.01 / 0.76
Luminous Opening:	Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type:	Direct

Input Watts (W):	19.1
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:	24 FT

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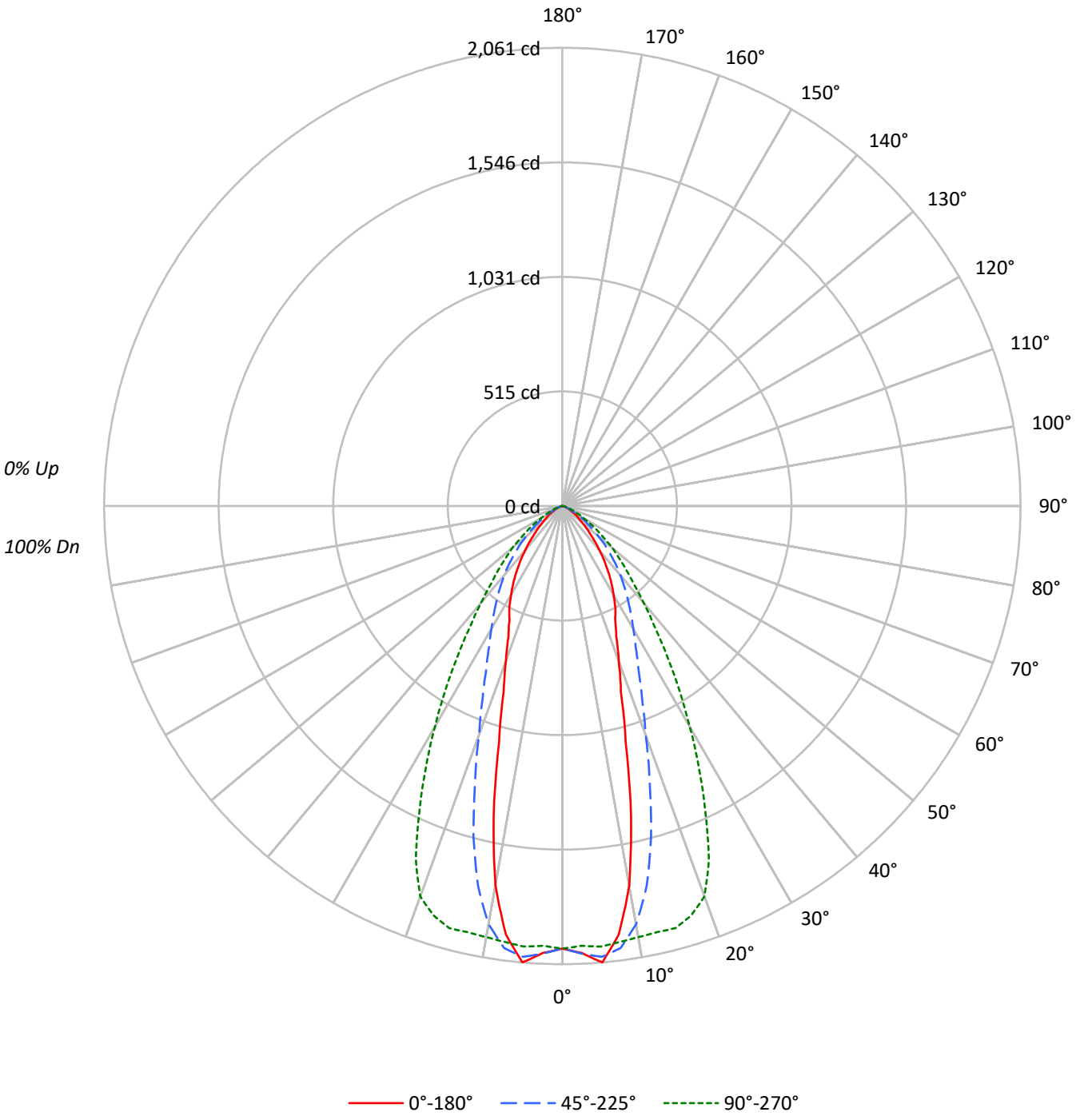
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64
6	83	73	67	62	82	73	66	62	71	65	61	69	65	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	61	57	65	60	56	64	59	56	54
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51
9	71	60	54	49	70	60	53	49	59	53	49	58	53	49	57	52	49	47
10	67	57	50	46	66	56	50	46	55	50	46	55	49	46	54	49	46	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	64286	64286	64286
5°	66794	65984	64473
10°	56815	62632	64573
15°	36781	51577	65715
20°	25491	37684	64223
25°	20045	28857	54268
30°	17171	23786	42694
35°	14128	20203	32211
40°	10952	17148	24019
45°	8101	13828	18577
50°	5943	10620	14765
55°	4436	7567	10792
60°	3126	5089	7291
65°	2193	3286	4928
70°	1520	2200	3210
75°	1123	1347	2233
80°	669	1004	1674
85°	667	667	667

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	10.3
10°-20°	429.0	23.5
20°-30°	438.4	24.0
30°-40°	350.8	19.2
40°-50°	234.5	12.8
50°-60°	123.6	6.8
60°-70°	46.7	2.6
70°-80°	13.7	0.8
80°-90°	2.1	0.1
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°	1055.6	57.8
0°-40°	1406.3	77.0
0°-60°	1764.5	96.6
0°-90°	1827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1827.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1991	1991	1991	1991	1991	
5°	2061	2031	2036	2005	1989	185
15°	1100	1214	1543	1873	1966	314
25°	563	607	810	1331	1523	264
35°	358	390	512	742	817	223
45°	177	206	303	400	407	140
55°	79	89	134	184	192	72
65°	29	32	43	58	64	30
75°	9	9	11	15	18	10
85°	2	2	2	2	2	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8	1990.8
2.5°	2012.3	2010.5	2030.2	2015.9	2021.2	2015.9	1999.7	1990.8	1989.0	1971.1	1980.0
5°	2060.6	2032.0	2037.4	2028.4	2037.4	2035.6	2017.6	2006.9	1997.9	1987.2	1989.0
7.5°	1944.2	1947.8	1963.9	1971.1	1996.1	2005.1	1996.1	1989.0	1981.8	1976.4	1978.2
10°	1732.7	1745.3	1768.6	1815.2	1867.1	1910.1	1928.0	1947.8	1963.9	1965.7	1969.3
12.5°	1426.3	1444.2	1481.9	1532.0	1646.7	1750.7	1838.5	1906.5	1946.0	1967.5	1963.9
15°	1100.2	1105.6	1152.2	1234.6	1360.0	1542.8	1716.6	1854.6	1926.3	1976.4	1965.7
17.5°	876.2	883.4	921.0	983.7	1103.8	1306.3	1566.1	1772.2	1903.0	1938.8	1929.8
20°	741.8	736.5	765.1	817.1	917.4	1096.6	1367.2	1643.1	1808.0	1858.2	1868.9
22.5°	634.3	639.7	657.6	698.8	786.6	935.4	1182.6	1474.7	1657.5	1713.0	1722.0
25°	562.6	568.0	585.9	614.6	686.3	809.9	1023.2	1286.6	1465.7	1519.5	1523.1
27.5°	516.1	512.5	525.0	546.5	609.2	715.0	890.6	1109.2	1275.8	1329.6	1333.1
30°	460.5	458.7	471.3	494.6	544.7	637.9	786.6	964.0	1082.3	1134.3	1145.0
32.5°	410.3	408.5	422.9	442.6	492.8	573.4	702.4	840.4	921.0	964.0	974.8
35°	358.4	360.2	370.9	396.0	440.8	512.5	630.7	727.5	784.8	806.3	817.1
37.5°	308.2	310.0	324.3	349.4	394.2	458.7	553.7	628.9	663.0	679.1	677.3
40°	259.8	263.4	272.4	301.0	345.8	406.8	483.8	539.4	562.6	564.4	569.8
42.5°	216.8	216.8	231.2	254.4	297.5	354.8	422.9	462.3	480.2	478.4	474.8
45°	177.4	179.2	188.1	211.4	250.9	302.8	362.0	397.8	408.5	401.4	406.8
47.5°	145.1	146.9	154.1	175.6	209.6	259.8	306.4	340.5	349.4	344.0	344.0
50°	118.3	120.1	125.4	141.6	170.2	211.4	254.4	283.1	292.1	290.3	293.9
52.5°	96.8	96.8	102.1	114.7	138.0	172.0	206.1	231.2	238.3	236.5	234.7
55°	78.8	78.8	82.4	91.4	109.3	134.4	163.1	182.8	188.1	189.9	191.7
57.5°	62.7	62.7	64.5	71.7	84.2	103.9	125.4	139.8	145.1	146.9	148.7
60°	48.4	48.4	52.0	55.5	66.3	78.8	93.2	103.9	111.1	111.1	112.9
62.5°	37.6	37.6	39.4	43.0	50.2	59.1	68.1	77.1	80.6	84.2	86.0
65°	28.7	28.7	30.5	32.3	37.6	43.0	50.2	57.3	60.9	62.7	64.5
67.5°	21.5	21.5	21.5	25.1	28.7	32.3	35.8	41.2	43.0	46.6	48.4
70°	16.1	16.1	16.1	17.9	19.7	23.3	25.1	28.7	32.3	34.0	34.0
72.5°	12.5	12.5	12.5	12.5	14.3	16.1	17.9	19.7	23.3	25.1	25.1
75°	9.0	9.0	9.0	9.0	10.8	10.8	12.5	14.3	16.1	17.9	17.9
77.5°	7.2	7.2	5.4	7.2	7.2	7.2	9.0	9.0	10.8	12.5	12.5
80°	3.6	3.6	3.6	3.6	5.4	5.4	5.4	7.2	7.2	7.2	9.0
82.5°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6	5.4	5.4
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)