

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

Brand: NEO-RAY

Report Number: P1032196

Luminaire Tested: S123RDIW-B340D1320UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032196
REPORT IS A COMBINATION OF REPORTS P994206 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1320UB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

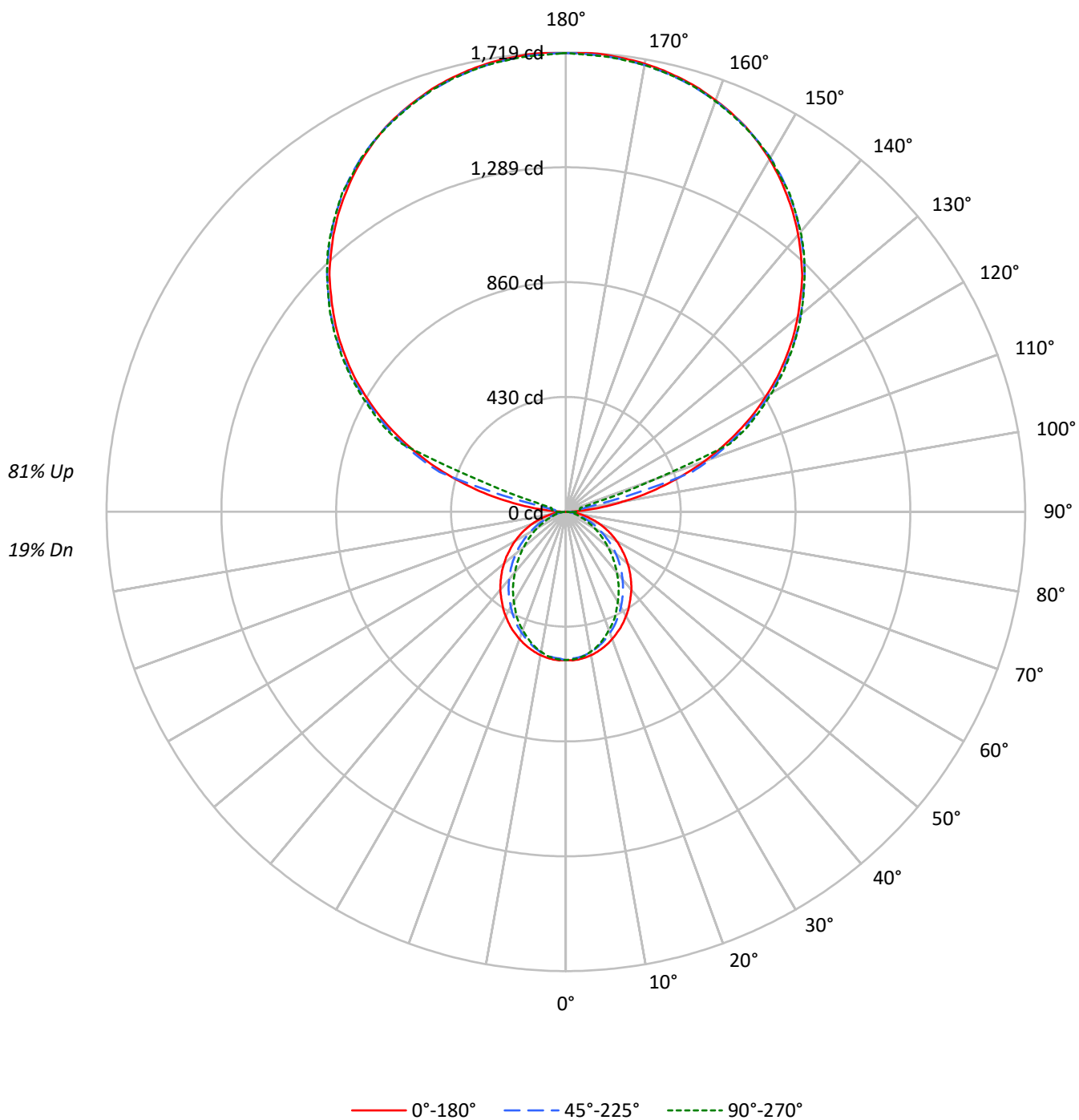
Lumens per Lamp: N/A
Luminaire Lumens: 6489.9 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
Input Voltage (V):
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
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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	25	24	24
2	83	76	70	65	73	67	63	59	51	48	45	36	34	32	22	21	20
3	76	67	60	55	67	59	54	49	45	41	38	32	29	27	20	18	17
4	69	59	52	46	61	52	46	41	40	36	32	28	26	24	18	16	15
5	63	52	45	39	56	47	40	35	36	31	28	25	23	20	16	14	13
6	58	47	39	34	51	42	35	31	32	27	24	23	20	18	14	13	11
7	54	42	35	29	47	38	31	27	29	24	21	21	18	16	13	11	10
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	10	9
9	46	35	28	23	41	31	25	21	24	20	16	17	14	12	11	9	8
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5970	5970	5970
5°	5979	5759	5743
10°	5933	5542	5433
15°	5856	5274	5093
20°	5754	4984	4714
25°	5650	4681	4354
30°	5517	4359	3929
35°	5379	4043	3541
40°	5249	3700	3114
45°	5084	3364	2729
50°	4901	3006	2331
55°	4711	2622	1966
60°	4529	2229	1596
65°	4296	1826	1246
70°	3999	1381	891
75°	3576	935	706
80°	3051	649	495
85°	2286	351	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	0.8
10°-20°	145.0	2.2
20°-30°	208.8	3.2
30°-40°	235.2	3.6
40°-50°	225.0	3.5
50°-60°	184.1	2.8
60°-70°	124.2	1.9
70°-80°	62.3	1.0
80°-90°	19.7	0.3
90°-100°	60.6	0.9
100°-110°	292.7	4.5
110°-120°	717.2	11.1
120°-130°	910.5	14.0
130°-140°	972.7	15.0
140°-150°	909.6	14.0
150°-160°	733.7	11.3
160°-170°	473.5	7.3
170°-180°	163.2	2.5
0°-30°	406.0	6.3
0°-40°	641.2	9.9
0°-60°	1050.3	16.2
0°-90°	1256.4	19.4
90°-120°	1070.5	16.5
90°-150°	3863.3	59.5
90°-180°	5234.0	80.6
0°-180°	6489.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	555	552	547	551	550	53
15°	529	524	511	509	506	149
25°	481	470	449	440	435	221
35°	416	400	372	353	345	261
45°	342	322	287	262	251	264
55°	260	238	200	174	165	233
65°	178	153	118	96	91	176
75°	94	72	48	43	42	100
85°	24	14	13	12	12	26
90°	1	14	31	36	38	6
95°	78	26	40	48	48	93
105°	380	394	279	54	56	403
115°	713	721	732	745	750	704
125°	1005	1015	1020	1023	1025	898
135°	1251	1259	1264	1268	1264	963
145°	1444	1453	1455	1458	1458	904
155°	1590	1588	1589	1596	1588	733
165°	1677	1673	1672	1682	1673	474
175°	1717	1710	1712	1720	1710	163
180°	1717	1717	1717	1717	1717	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	554.6	554.6	554.6	554.6	554.6
2.5°	556.9	555.1	549.7	554.6	553.7
5°	554.6	552.4	547.0	551.0	550.1
7.5°	550.6	548.3	541.6	544.3	542.9
10°	545.2	542.0	533.9	534.4	532.1
12.5°	537.5	533.9	523.6	523.1	520.4
15°	529.0	524.0	511.4	509.2	506.0
17.5°	518.6	513.2	497.5	493.0	488.5
20°	506.9	499.7	482.7	476.8	471.4
22.5°	493.9	485.4	466.9	459.3	454.3
25°	481.3	470.1	449.4	439.9	435.0
27.5°	466.0	453.9	431.4	418.8	411.1
30°	450.3	436.8	411.6	396.3	389.1
32.5°	434.5	418.8	391.8	374.7	367.1
35°	416.5	400.3	372.4	353.1	345.0
37.5°	398.5	381.0	351.8	330.2	320.3
40°	381.4	361.7	329.7	306.3	296.0
42.5°	362.1	342.3	309.0	282.9	273.9
45°	342.3	322.1	287.4	261.8	251.0
47.5°	323.0	300.5	266.3	238.4	229.0
50°	301.4	280.2	243.8	215.9	205.6
52.5°	282.0	258.6	222.7	193.4	184.4
55°	260.0	238.0	199.7	173.6	164.6
57.5°	240.2	216.4	177.7	152.9	145.3
60°	219.5	194.8	157.4	133.1	125.5
62.5°	198.8	174.1	136.7	114.3	106.2
65°	177.7	152.9	117.9	95.8	90.9
67.5°	156.5	131.3	97.2	80.5	75.1
70°	135.8	111.6	80.1	64.3	59.4
72.5°	115.2	91.3	63.4	51.3	49.9
75°	94.0	72.4	47.7	43.2	42.3
77.5°	74.7	54.9	37.3	34.6	33.7
80°	56.2	37.8	28.3	27.0	26.1
82.5°	38.7	23.4	20.2	18.9	18.9
85°	23.8	13.9	12.6	11.7	11.7
87.5°	10.8	5.8	5.8	5.4	4.9
90°	1.3	14.0	30.6	35.7	38.3
92.5°	29.3	21.7	33.2	42.1	43.4
95°	77.8	25.5	39.5	48.5	48.5
97.5°	141.6	105.9	40.8	51.0	52.3
100°	215.5	241.1	42.1	52.3	53.6
102.5°	299.7	316.3	94.4	52.3	54.8
105°	380.1	394.1	279.3	53.6	56.1
107.5°	465.5	477.0	496.1	299.7	132.6
110°	551.0	561.2	575.2	533.1	350.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	632.6	641.5	655.6	667.0	664.5
115°	713.0	720.6	732.1	744.8	749.9
117.5°	792.0	801.0	807.3	817.5	818.8
120°	864.7	876.2	880.0	890.2	890.2
122.5°	938.7	947.6	952.7	959.1	960.4
125°	1005.0	1015.2	1020.3	1022.9	1025.4
127.5°	1071.4	1081.6	1087.9	1091.8	1089.2
130°	1132.6	1142.8	1147.9	1153.0	1150.4
132.5°	1191.2	1201.5	1205.3	1210.4	1206.6
135°	1251.2	1258.8	1263.9	1267.8	1263.9
137.5°	1302.2	1312.4	1315.0	1321.3	1318.8
140°	1353.2	1360.9	1364.7	1369.8	1367.3
142.5°	1400.4	1408.1	1411.9	1415.7	1411.9
145°	1443.8	1452.7	1455.3	1457.8	1457.8
147.5°	1485.9	1492.2	1494.8	1497.3	1491.0
150°	1524.1	1528.0	1530.5	1533.1	1529.2
152.5°	1558.6	1559.8	1561.1	1566.2	1559.8
155°	1590.5	1587.9	1589.2	1595.6	1587.9
157.5°	1616.0	1616.0	1614.7	1622.3	1612.1
160°	1638.9	1637.6	1636.4	1644.0	1635.1
162.5°	1660.6	1656.8	1655.5	1664.4	1656.8
165°	1677.2	1673.4	1672.1	1682.3	1673.4
167.5°	1691.2	1686.1	1686.1	1696.3	1686.1
170°	1702.7	1697.6	1697.6	1707.8	1697.6
172.5°	1710.3	1704.0	1705.2	1715.4	1704.0
175°	1716.7	1710.3	1711.6	1720.5	1710.3
177.5°	1719.3	1712.9	1714.2	1724.4	1711.6
180°	1716.7	1716.7	1716.7	1716.7	1716.7

(END OF REPORT)