

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: P1032209

Luminaire Tested: S123RDIW-B340D1320UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032209
REPORT IS A COMBINATION OF REPORTS P994239 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1320UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

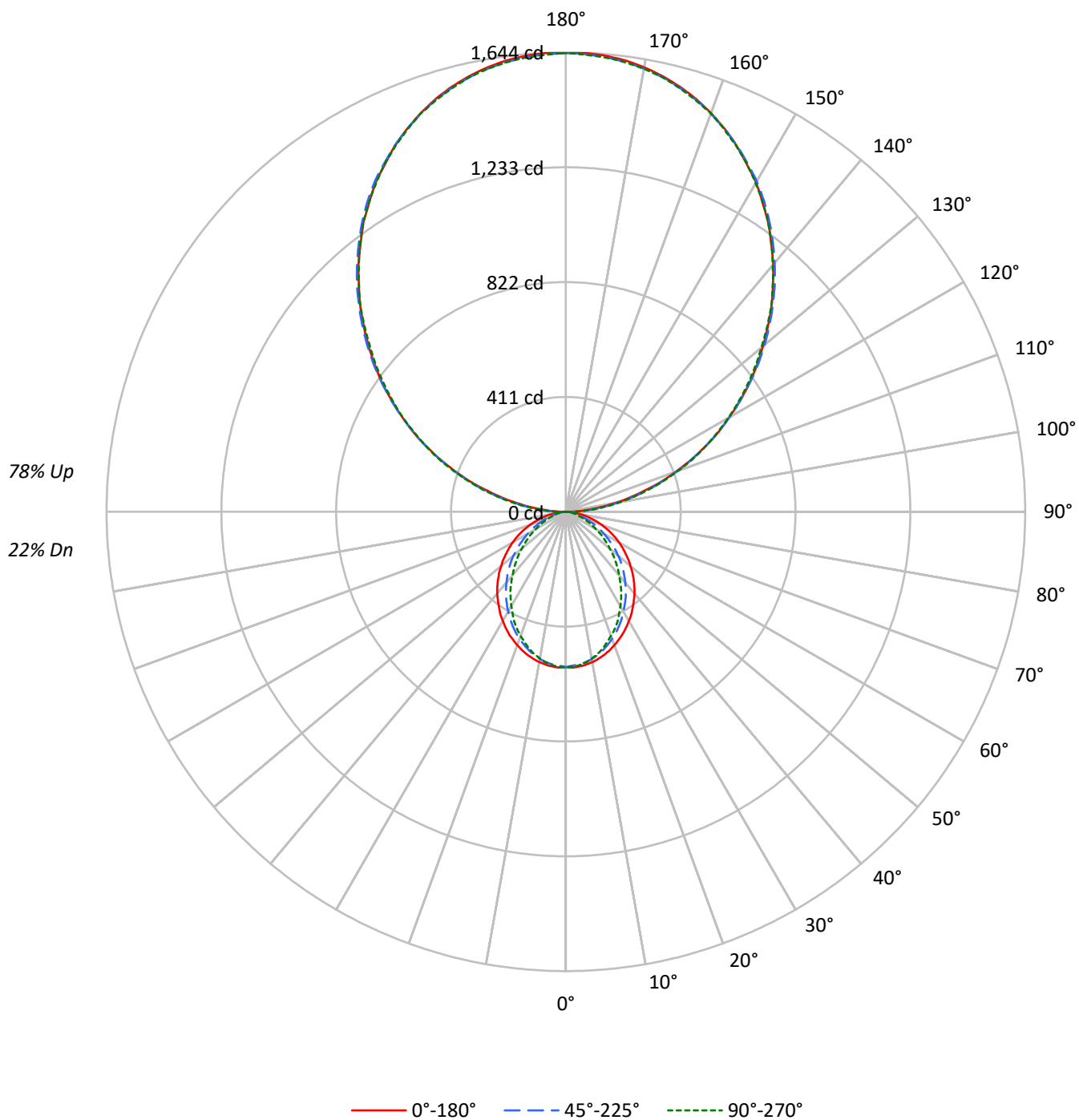
Lumens per Lamp: N/A
Luminaire Lumens: 5810.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	30	30	22
1	92	87	84	81	81	78	75	72	59	57	55	42	41	40	27	26	26	26	26	19
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22	22	22	16
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	21	20	19	19	19	13
4	70	59	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16	16	16	12
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14	14	14	10
6	59	47	40	34	52	42	36	31	33	28	25	24	21	18	15	14	12	12	12	9
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11	11	11	8
8	50	38	31	26	44	34	28	24	27	22	19	20	17	14	13	11	10	10	10	7
9	47	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	9	9	7
10	43	32	25	21	38	29	23	19	22	18	15	17	14	12	11	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5985	5985	5985
5°	5994	5773	5756
10°	5947	5555	5446
15°	5870	5288	5106
20°	5769	4995	4725
25°	5664	4692	4364
30°	5529	4370	3938
35°	5392	4053	3550
40°	5263	3709	3121
45°	5095	3372	2736
50°	4913	3013	2337
55°	4722	2629	1971
60°	4540	2234	1600
65°	4305	1829	1249
70°	4011	1384	892
75°	3583	937	707
80°	3062	651	497
85°	2296	351	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	0.9
10°-20°	145.4	2.5
20°-30°	209.3	3.6
30°-40°	235.7	4.1
40°-50°	225.5	3.9
50°-60°	184.6	3.2
60°-70°	124.4	2.1
70°-80°	62.4	1.1
80°-90°	19.8	0.3
90°-100°	105.7	1.8
100°-110°	320.0	5.5
110°-120°	544.7	9.4
120°-130°	716.6	12.3
130°-140°	805.5	13.9
140°-150°	791.9	13.6
150°-160°	666.7	11.5
160°-170°	443.9	7.6
170°-180°	155.4	2.7
0°-30°	407.0	7.0
0°-40°	642.7	11.1
0°-60°	1052.8	18.1
0°-90°	1259.5	21.7
90°-120°	970.4	16.7
90°-150°	3284.5	56.5
90°-180°	4551.0	78.3
0°-180°	5810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	556	554	548	552	551	53
15°	530	525	513	510	507	149
25°	482	471	450	441	436	222
35°	418	401	373	354	346	261
45°	343	323	288	262	252	265
55°	261	238	200	174	165	234
65°	178	153	118	96	91	176
75°	94	73	48	43	42	100
85°	24	14	13	12	12	26
90°	1	14	31	36	39	7
95°	76	85	96	101	101	84
105°	290	293	304	304	307	311
115°	548	552	550	551	550	543
125°	802	806	804	799	793	716
135°	1041	1049	1048	1042	1040	802
145°	1263	1266	1270	1268	1263	789
155°	1446	1446	1448	1453	1444	666
165°	1575	1571	1571	1579	1570	444
175°	1638	1633	1633	1641	1632	156
180°	1642	1642	1642	1642	1642	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.0	556.0	556.0	556.0	556.0
2.5°	558.2	556.4	551.0	556.0	555.1
5°	556.0	553.7	548.3	552.3	551.4
7.5°	551.9	549.6	542.9	545.6	544.2
10°	546.5	543.3	535.2	535.7	533.4
12.5°	538.8	535.2	524.8	524.4	521.7
15°	530.3	525.3	512.7	510.4	507.3
17.5°	519.9	514.5	498.7	494.2	489.7
20°	508.2	500.9	483.8	477.9	472.5
22.5°	495.1	486.5	468.0	460.4	455.4
25°	482.5	471.2	450.4	441.0	436.0
27.5°	467.1	455.0	432.4	419.8	412.1
30°	451.3	437.8	412.6	397.2	390.0
32.5°	435.6	419.8	392.7	375.6	367.9
35°	417.5	401.3	373.3	354.0	345.8
37.5°	399.5	381.9	352.6	331.0	321.0
40°	382.4	362.5	330.5	307.1	296.7
42.5°	363.0	343.1	309.8	283.6	274.6
45°	343.1	322.8	288.1	262.4	251.6
47.5°	323.7	301.2	266.9	239.0	229.5
50°	302.1	280.9	244.4	216.4	206.1
52.5°	282.7	259.3	223.2	193.9	184.9
55°	260.6	238.5	200.2	174.0	165.0
57.5°	240.8	216.9	178.1	153.3	145.6
60°	220.0	195.2	157.8	133.5	125.8
62.5°	199.3	174.5	137.1	114.5	106.4
65°	178.1	153.3	118.1	96.0	91.1
67.5°	156.9	131.7	97.4	80.7	75.3
70°	136.2	111.8	80.3	64.5	59.5
72.5°	115.4	91.5	63.6	51.4	50.0
75°	94.2	72.6	47.8	43.3	42.4
77.5°	74.8	55.0	37.4	34.7	33.8
80°	56.4	37.9	28.4	27.1	26.2
82.5°	38.8	23.4	20.3	18.9	18.9
85°	23.9	14.0	12.6	11.7	11.7
87.5°	10.8	5.9	5.9	5.4	5.0
90°	1.3	14.2	31.0	36.1	38.7
92.5°	38.7	46.4	54.2	58.1	55.5
95°	76.1	85.1	95.5	100.6	100.6
97.5°	125.1	131.6	139.3	145.8	144.5
100°	175.5	183.2	189.6	193.5	196.1
102.5°	233.5	237.4	246.4	250.3	249.0
105°	290.3	292.9	304.5	304.5	307.0
107.5°	357.4	358.6	363.8	367.7	366.4
110°	419.3	421.9	424.4	429.6	427.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	483.8	485.1	485.1	491.5	491.5
115°	548.3	552.2	549.6	550.9	549.6
117.5°	614.1	615.4	612.8	612.8	608.9
120°	674.7	682.5	676.0	674.7	672.1
122.5°	737.9	743.1	740.5	736.7	732.8
125°	802.4	806.3	803.7	798.6	793.4
127.5°	861.8	869.5	867.0	859.2	854.1
130°	921.1	931.5	927.6	922.4	913.4
132.5°	980.5	990.8	988.2	981.8	975.3
135°	1041.1	1048.9	1047.6	1042.4	1039.8
137.5°	1096.6	1103.0	1106.9	1100.5	1096.6
140°	1154.6	1161.1	1162.4	1161.1	1152.1
142.5°	1207.5	1214.0	1216.6	1215.3	1208.8
145°	1263.0	1265.6	1269.5	1268.2	1263.0
147.5°	1310.7	1315.9	1319.8	1319.8	1312.0
150°	1361.1	1363.6	1366.2	1366.2	1358.5
152.5°	1402.3	1406.2	1407.5	1410.1	1403.6
155°	1446.2	1446.2	1447.5	1452.7	1443.6
157.5°	1483.6	1482.3	1483.6	1488.8	1481.0
160°	1518.5	1515.9	1515.9	1522.3	1517.2
162.5°	1549.4	1545.5	1546.8	1553.3	1544.3
165°	1575.2	1571.3	1571.3	1579.1	1570.1
167.5°	1597.2	1592.0	1593.3	1601.0	1593.3
170°	1615.2	1610.1	1610.1	1619.1	1610.1
172.5°	1629.4	1624.2	1624.2	1632.0	1623.0
175°	1638.4	1633.3	1633.3	1641.0	1632.0
177.5°	1643.6	1638.4	1638.4	1646.2	1637.1
180°	1642.3	1642.3	1642.3	1642.3	1642.3

(END OF REPORT)