

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: P1032178

Luminaire Tested: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032178
REPORT IS A COMBINATION OF REPORTS P994162 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1030UB27-4F0-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

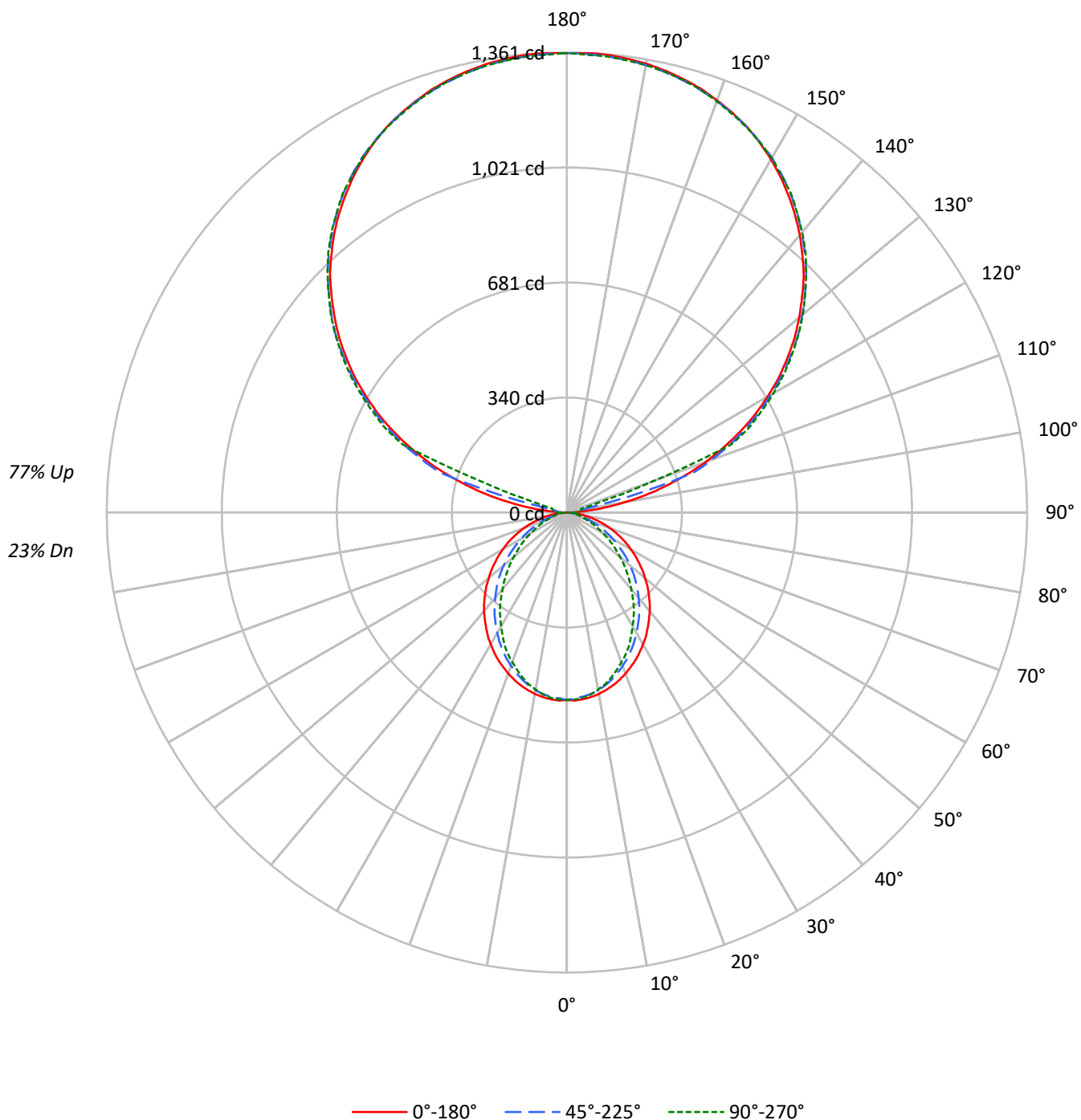
Lumens per Lamp: N/A
Luminaire Lumens: 5400.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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

TEST NUMBER: P1032178

CATALOG NUMBER: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1032178

CATALOG NUMBER: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

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	0
RCR																		
0	101	101	101	101	90	90	90	90	68	68	68	49	49	49	32	32	32	23
1	92	88	84	81	82	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	64	60	53	50	47	38	36	35	25	24	23	17
3	76	68	61	55	68	60	54	50	47	43	39	34	31	29	22	21	20	14
4	70	60	52	47	62	53	47	42	41	37	34	30	27	25	20	18	17	13
5	64	53	45	40	57	48	41	36	37	32	29	27	24	22	18	16	15	11
6	59	48	40	34	52	43	36	31	33	29	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10	8
9	47	35	28	23	42	32	25	21	25	20	17	19	15	13	13	11	9	7
10	44	32	25	21	39	29	23	19	23	18	15	17	14	12	12	10	9	6

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

TEST NUMBER: P1032178

CATALOG NUMBER: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.0
10°-20°	145.0	2.7
20°-30°	208.8	3.9
30°-40°	235.2	4.4
40°-50°	225.0	4.2
50°-60°	184.1	3.4
60°-70°	124.2	2.3
70°-80°	62.3	1.2
80°-90°	19.0	0.4
90°-100°	47.9	0.9
100°-110°	231.8	4.3
110°-120°	568.0	10.5
120°-130°	721.0	13.4
130°-140°	770.3	14.3
140°-150°	720.3	13.3
150°-160°	581.0	10.8
160°-170°	374.9	6.9
170°-180°	129.2	2.4
0°-30°	406.0	7.5
0°-40°	641.2	11.9
0°-60°	1050.3	19.4
0°-90°	1255.7	23.3
90°-120°	847.7	15.7
90°-150°	3059.2	56.7
90°-180°	4144.0	76.7
0°-180°	5400.0	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	11	24	28	30	5
95°	62	20	31	38	38	74
105°	301	312	221	42	44	319
115°	565	571	580	590	594	558
125°	796	804	808	810	812	711
135°	991	997	1001	1004	1001	763
145°	1143	1150	1152	1154	1154	716
155°	1259	1257	1258	1264	1257	580
165°	1328	1325	1324	1332	1325	375
175°	1359	1354	1355	1362	1354	129
180°	1359	1359	1359	1359	1359	

TEST NUMBER: P1032178

CATALOG NUMBER: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

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°	1.0	11.1	24.2	28.3	30.3
92.5°	23.2	17.2	26.3	33.3	34.3
95°	61.6	20.2	31.3	38.4	38.4
97.5°	112.1	83.8	32.3	40.4	41.4
100°	170.7	190.9	33.3	41.4	42.4
102.5°	237.3	250.5	74.7	41.4	43.4
105°	301.0	312.1	221.2	42.4	44.4
107.5°	368.6	377.7	392.9	237.3	105.0
110°	436.3	444.4	455.5	422.2	277.7

TEST NUMBER: P1032178

CATALOG NUMBER: S123RDIW-B340D1030UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.9	508.0	519.1	528.2	526.2
115°	564.6	570.6	579.7	589.8	593.9
117.5°	627.2	634.3	639.3	647.4	648.4
120°	684.8	693.8	696.9	705.0	705.0
122.5°	743.3	750.4	754.4	759.5	760.5
125°	795.9	803.9	808.0	810.0	812.0
127.5°	848.4	856.5	861.5	864.5	862.5
130°	896.8	904.9	909.0	913.0	911.0
132.5°	943.3	951.4	954.4	958.5	955.4
135°	990.8	996.8	1000.9	1003.9	1000.9
137.5°	1031.2	1039.3	1041.3	1046.3	1044.3
140°	1071.6	1077.6	1080.7	1084.7	1082.7
142.5°	1108.9	1115.0	1118.0	1121.1	1118.0
145°	1143.3	1150.4	1152.4	1154.4	1154.4
147.5°	1176.6	1181.7	1183.7	1185.7	1180.6
150°	1206.9	1209.9	1212.0	1214.0	1210.9
152.5°	1234.2	1235.2	1236.2	1240.2	1235.2
155°	1259.4	1257.4	1258.4	1263.5	1257.4
157.5°	1279.6	1279.6	1278.6	1284.7	1276.6
160°	1297.8	1296.8	1295.8	1301.8	1294.8
162.5°	1315.0	1311.9	1310.9	1318.0	1311.9
165°	1328.1	1325.1	1324.1	1332.1	1325.1
167.5°	1339.2	1335.2	1335.2	1343.3	1335.2
170°	1348.3	1344.3	1344.3	1352.3	1344.3
172.5°	1354.4	1349.3	1350.3	1358.4	1349.3
175°	1359.4	1354.4	1355.4	1362.4	1354.4
177.5°	1361.4	1356.4	1357.4	1365.5	1355.4
180°	1359.4	1359.4	1359.4	1359.4	1359.4

(END OF REPORT)