

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: P1012668

Luminaire Tested: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012668
REPORT IS A COMBINATION OF REPORTS P993477 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B560D585UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

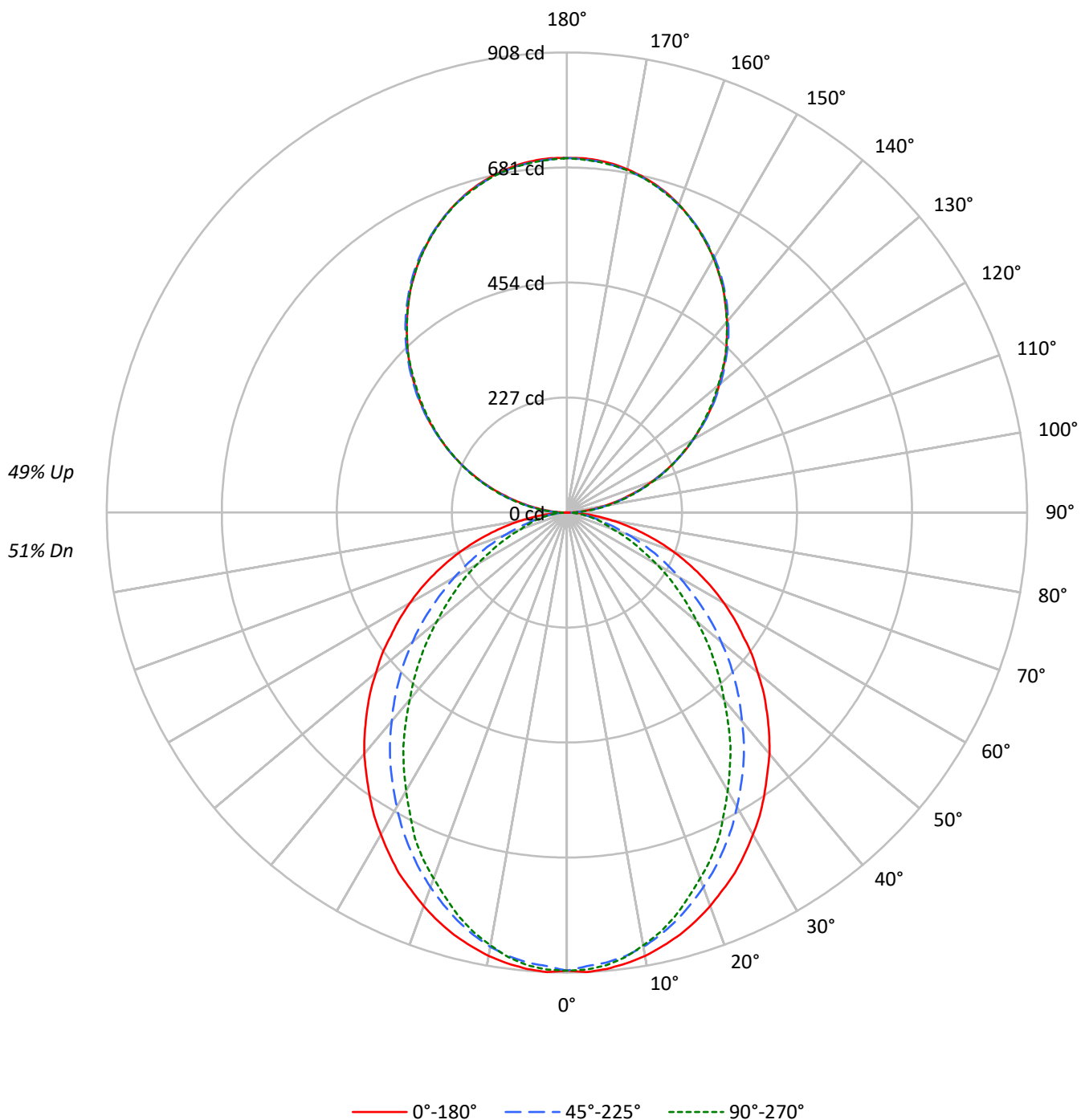
Lumens per Lamp: N/A
Luminaire Lumens: 3983.0 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
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: P1012668

CATALOG NUMBER: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1012668

CATALOG NUMBER: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	51
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	49	49	44
2	90	83	77	72	83	77	71	67	65	62	58	55	52	50	45	44	42	42	42	37
3	82	73	66	60	76	68	61	56	58	53	49	49	45	43	41	38	36	36	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	36	34	31	31	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	27	27	24
6	64	52	44	38	59	49	41	36	42	36	32	36	31	28	30	27	24	24	24	21
7	59	47	39	34	55	44	37	32	38	33	28	33	28	25	27	24	22	22	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	25	22	20	20	20	17
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	23	20	18	18	18	16
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	18	16	16	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9734	9734	9734
5°	9750	9389	9364
10°	9673	9037	8858
15°	9547	8600	8305
20°	9383	8126	7685
25°	9213	7632	7099
30°	8996	7108	6406
35°	8771	6593	5774
40°	8559	6033	5077
45°	8288	5486	4450
50°	7991	4901	3801
55°	7681	4275	3206
60°	7385	3634	2602
65°	7003	2977	2032
70°	6523	2250	1451
75°	5831	1523	1149
80°	4978	1059	806
85°	3737	571	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8288 cd/sqm

TEST NUMBER: P1012668

CATALOG NUMBER: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	2.1
10°-20°	236.5	5.9
20°-30°	340.5	8.5
30°-40°	383.4	9.6
40°-50°	366.8	9.2
50°-60°	300.2	7.5
60°-70°	202.4	5.1
70°-80°	101.5	2.5
80°-90°	28.0	0.7
90°-100°	45.0	1.1
100°-110°	136.3	3.4
110°-120°	232.1	5.8
120°-130°	305.3	7.7
130°-140°	343.2	8.6
140°-150°	337.4	8.5
150°-160°	284.0	7.1
160°-170°	189.1	4.7
170°-180°	66.2	1.7
0°-30°	662.0	16.6
0°-40°	1045.4	26.2
0°-60°	1712.5	43.0
0°-90°	2044.5	51.3
90°-120°	413.4	10.4
90°-150°	1399.2	35.1
90°-180°	1939.0	48.7
0°-180°	3983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	901	892	898	897	86
15°	862	854	834	830	825	243
25°	785	766	733	717	709	361
35°	679	653	607	576	562	425
45°	558	525	469	427	409	431
55°	424	388	326	283	268	380
65°	290	249	192	156	148	287
75°	153	118	78	70	69	163
85°	39	23	20	19	19	43
90°	0	6	13	15	16	5
95°	32	36	41	43	43	36
105°	124	125	130	130	131	132
115°	234	235	234	235	234	231
125°	342	344	342	340	338	305
135°	444	447	446	444	443	342
145°	538	539	541	540	538	336
155°	616	616	617	619	615	284
165°	671	669	669	673	669	189
175°	698	696	696	699	695	66
180°	700	700	700	700	700	

TEST NUMBER: P1012668

CATALOG NUMBER: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	904.3	904.3	904.3	904.3	904.3
2.5°	908.0	905.0	896.2	904.3	902.8
5°	904.3	900.6	891.8	898.4	897.0
7.5°	897.7	894.0	883.0	887.4	885.2
10°	888.9	883.8	870.6	871.3	867.6
12.5°	876.4	870.6	853.7	853.0	848.6
15°	862.5	854.4	833.9	830.2	825.1
17.5°	845.6	836.8	811.2	803.8	796.5
20°	826.6	814.8	787.0	777.4	768.6
22.5°	805.3	791.4	761.3	748.8	740.8
25°	784.8	766.4	732.7	717.3	709.2
27.5°	759.8	740.0	703.4	682.8	670.3
30°	734.2	712.2	671.1	646.1	634.4
32.5°	708.5	682.8	638.8	610.9	598.5
35°	679.2	652.7	607.3	575.7	562.5
37.5°	649.8	621.2	573.5	538.3	522.2
40°	621.9	589.7	537.6	499.5	482.6
42.5°	590.4	558.1	503.9	461.3	446.7
45°	558.1	525.1	468.7	426.9	409.3
47.5°	526.6	489.9	434.2	388.7	373.3
50°	491.4	456.9	397.5	352.0	335.2
52.5°	459.9	421.7	363.0	315.4	300.7
55°	423.9	388.0	325.6	283.1	268.4
57.5°	391.6	352.8	289.7	249.4	236.9
60°	357.9	317.6	256.7	217.1	204.6
62.5°	324.2	283.8	223.0	186.3	173.1
65°	289.7	249.4	192.2	156.2	148.2
67.5°	255.2	214.2	158.4	131.3	122.5
70°	221.5	181.9	130.5	104.9	96.8
72.5°	187.8	148.9	103.4	83.6	81.4
75°	153.3	118.1	77.7	70.4	68.9
77.5°	121.7	89.5	60.9	56.5	55.0
80°	91.7	61.6	46.2	44.0	42.5
82.5°	63.1	38.1	33.0	30.8	30.8
85°	38.9	22.7	20.5	19.1	19.1
87.5°	17.6	9.5	9.5	8.8	8.1
90°	0.5	6.0	13.2	15.4	16.5
92.5°	16.5	19.8	23.1	24.7	23.6
95°	32.4	36.3	40.7	42.9	42.9
97.5°	53.3	56.1	59.4	62.1	61.6
100°	74.7	78.0	80.8	82.4	83.5
102.5°	99.5	101.1	105.0	106.6	106.1
105°	123.7	124.8	129.7	129.7	130.8
107.5°	152.2	152.8	155.0	156.6	156.1
110°	178.6	179.7	180.8	183.0	181.9



TEST NUMBER: P1012668

CATALOG NUMBER: S123RDIP-B560D585UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.1	206.6	206.6	209.4	209.4
115°	233.6	235.2	234.1	234.7	234.1
117.5°	261.6	262.2	261.1	261.1	259.4
120°	287.4	290.7	288.0	287.4	286.3
122.5°	314.4	316.6	315.5	313.8	312.2
125°	341.8	343.5	342.4	340.2	338.0
127.5°	367.1	370.4	369.3	366.0	363.8
130°	392.4	396.8	395.2	393.0	389.1
132.5°	417.7	422.1	421.0	418.2	415.5
135°	443.5	446.8	446.3	444.1	443.0
137.5°	467.1	469.9	471.5	468.8	467.1
140°	491.9	494.6	495.2	494.6	490.8
142.5°	514.4	517.2	518.3	517.7	515.0
145°	538.0	539.1	540.8	540.2	538.0
147.5°	558.4	560.6	562.2	562.2	558.9
150°	579.8	580.9	582.0	582.0	578.7
152.5°	597.4	599.0	599.6	600.7	597.9
155°	616.1	616.1	616.6	618.8	615.0
157.5°	632.0	631.5	632.0	634.2	630.9
160°	646.9	645.8	645.8	648.5	646.3
162.5°	660.1	658.4	659.0	661.7	657.9
165°	671.0	669.4	669.4	672.7	668.8
167.5°	680.4	678.2	678.7	682.0	678.7
170°	688.1	685.9	685.9	689.7	685.9
172.5°	694.1	691.9	691.9	695.2	691.4
175°	698.0	695.8	695.8	699.1	695.2
177.5°	700.2	698.0	698.0	701.3	697.4
180°	699.6	699.6	699.6	699.6	699.6

(END OF REPORT)