

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: P1026377

Luminaire Tested: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026377
REPORT IS A COMBINATION OF REPORTS P999417 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B350D810UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

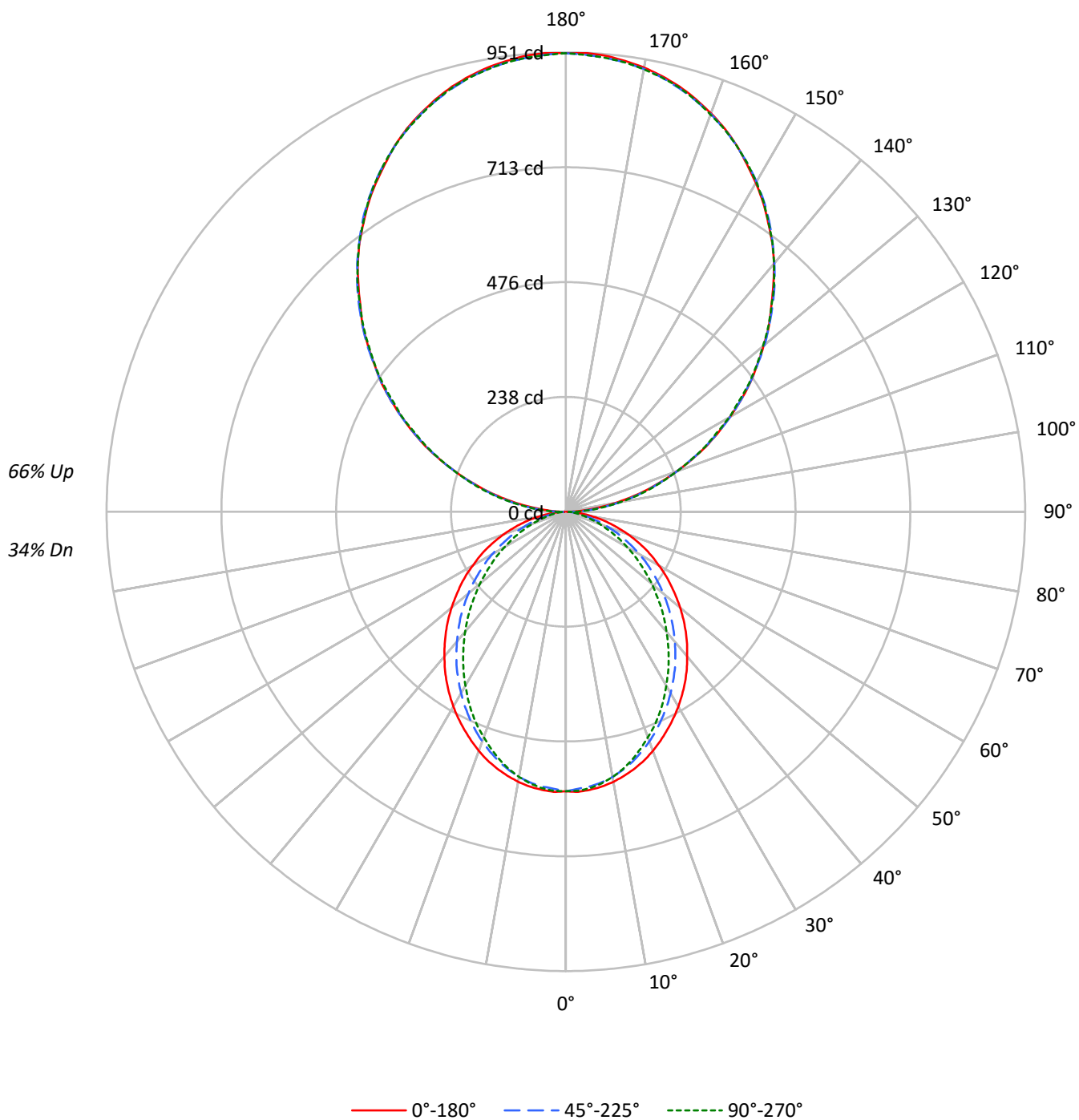
Lumens per Lamp: N/A
Luminaire Lumens: 3973.0 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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

TEST NUMBER: P1026377

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1026377

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	82	78	76	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30
3	79	69	62	57	71	63	57	52	51	46	43	39	36	34	29	27	26
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	23	21	19
6	61	49	41	36	55	45	38	33	36	31	28	29	25	22	21	19	17
7	56	44	37	31	50	40	34	29	33	28	24	26	22	20	19	17	15
8	52	40	33	27	47	37	30	25	30	25	21	24	20	18	18	15	14
9	48	37	29	24	44	33	27	23	27	23	19	22	18	16	16	14	12
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4719	4579	4579
10°	4679	4434	4381
15°	4615	4254	4148
20°	4530	4049	3882
25°	4426	3827	3622
30°	4323	3602	3331
35°	4209	3373	3045
40°	4075	3127	2752
45°	3948	2882	2462
50°	3804	2616	2168
55°	3649	2342	1864
60°	3477	2051	1564
65°	3311	1719	1275
70°	3074	1367	974
75°	2769	995	682
80°	2316	610	491
85°	1739	351	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3948 cd/sqm

TEST NUMBER: P1026377

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.4
10°-20°	151.7	3.8
20°-30°	219.0	5.5
30°-40°	248.2	6.2
40°-50°	239.7	6.0
50°-60°	199.3	5.0
60°-70°	137.5	3.5
70°-80°	69.5	1.7
80°-90°	19.7	0.5
90°-100°	61.9	1.6
100°-110°	185.3	4.7
110°-120°	314.8	7.9
120°-130°	415.2	10.5
130°-140°	466.4	11.7
140°-150°	458.4	11.5
150°-160°	385.5	9.7
160°-170°	256.5	6.5
170°-180°	89.8	2.3
0°-30°	425.2	10.7
0°-40°	673.4	16.9
0°-60°	1112.3	28.0
0°-90°	1339.0	33.7
90°-120°	562.1	14.1
90°-150°	1902.1	47.9
90°-180°	2634.0	66.3
0°-180°	3973.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	576	571	575	574	55
15°	550	546	535	534	531	155
25°	498	490	471	464	460	229
35°	430	416	394	379	371	269
45°	351	334	308	286	278	271
55°	266	248	219	196	188	238
65°	181	162	133	114	109	179
75°	96	80	59	49	46	101
85°	24	15	14	13	13	26
90°	2	10	16	21	22	5
95°	44	51	56	58	58	48
105°	171	172	175	177	179	181
115°	320	320	319	318	317	316
125°	466	466	466	464	462	416
135°	601	606	606	604	602	465
145°	730	734	734	734	731	457
155°	837	837	836	839	836	385
165°	911	909	908	912	909	257
175°	948	944	943	949	943	90
180°	949	949	949	949	949	

TEST NUMBER: P1026377

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.6	578.6	578.6	578.6	578.6
2.5°	580.4	578.6	573.8	578.6	578.2
5°	577.7	576.0	570.7	575.1	574.2
7.5°	573.8	572.0	565.3	568.4	567.1
10°	567.6	565.3	557.4	559.1	557.4
12.5°	559.6	556.9	547.2	548.1	545.4
15°	550.3	546.3	535.2	534.3	531.2
17.5°	539.6	533.9	521.0	518.8	514.4
20°	526.8	521.0	506.0	502.4	496.7
22.5°	512.6	506.0	489.6	483.8	479.4
25°	497.6	489.6	471.4	463.9	459.5
27.5°	482.0	472.3	453.3	444.4	438.2
30°	465.7	454.6	433.8	422.7	415.6
32.5°	448.4	435.5	413.8	400.5	393.9
35°	430.2	416.0	393.9	378.8	370.8
37.5°	411.2	396.5	372.2	355.8	347.8
40°	390.8	376.2	350.9	332.3	324.3
42.5°	371.3	355.8	329.2	310.1	301.7
45°	350.9	334.5	307.9	286.2	278.2
47.5°	330.1	313.2	285.8	263.2	254.3
50°	308.8	291.5	263.2	241.0	232.6
52.5°	287.1	270.3	241.0	218.4	209.6
55°	265.8	248.1	219.3	196.3	187.9
57.5°	245.0	226.4	198.0	174.6	168.4
60°	222.4	204.7	176.3	153.3	146.2
62.5°	202.0	183.4	154.2	133.4	128.0
65°	180.8	161.7	133.4	114.3	109.0
67.5°	158.6	140.4	113.9	97.0	90.8
70°	137.8	119.2	93.9	79.3	74.9
72.5°	115.6	99.2	75.8	63.8	59.8
75°	96.1	79.8	58.9	48.7	46.1
77.5°	75.8	61.6	43.9	36.8	35.9
80°	56.3	43.4	30.1	28.8	28.4
82.5°	39.4	27.9	21.7	20.8	20.4
85°	23.9	15.1	13.7	12.8	12.8
87.5°	10.2	6.6	6.2	5.8	6.2
90°	2.2	10.3	16.2	20.6	22.0
92.5°	19.1	28.6	32.3	34.5	35.2
95°	44.1	50.7	55.8	58.0	58.0
97.5°	70.5	76.4	82.2	85.2	85.2
100°	102.8	105.7	112.3	113.8	113.8
102.5°	136.6	137.3	143.2	145.4	146.1
105°	171.1	171.8	174.7	176.9	179.1
107.5°	207.0	207.8	208.5	211.4	210.7
110°	243.8	245.2	244.5	243.0	245.2

TEST NUMBER: P1026377

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	281.9	280.5	280.5	280.5
115°	320.1	320.1	318.6	317.9	317.2
117.5°	356.1	356.1	355.3	353.1	350.9
120°	392.1	395.0	392.8	389.1	390.6
122.5°	429.5	430.2	429.5	427.3	423.6
125°	466.2	466.2	465.5	464.0	462.5
127.5°	499.2	501.5	500.0	498.5	497.8
130°	534.5	536.7	536.7	535.2	532.3
132.5°	570.5	571.9	571.2	569.7	569.0
135°	601.3	605.7	605.7	604.2	602.0
137.5°	635.8	638.0	639.5	637.3	638.0
140°	670.3	671.8	671.8	671.0	670.3
142.5°	701.9	703.4	702.6	702.6	702.6
145°	730.5	733.5	734.2	733.5	731.3
147.5°	759.9	763.6	762.8	762.1	761.4
150°	786.3	789.3	789.3	789.3	788.5
152.5°	811.3	812.7	813.5	815.7	813.5
155°	837.0	837.0	836.2	839.2	836.2
157.5°	859.0	857.5	857.5	859.7	857.5
160°	878.1	877.4	876.6	878.8	875.2
162.5°	895.7	893.5	892.8	897.2	893.5
165°	911.1	908.9	907.5	911.9	908.9
167.5°	923.6	920.7	920.7	925.1	920.7
170°	933.9	930.2	930.9	935.4	930.2
172.5°	941.2	938.3	938.3	943.4	938.3
175°	947.8	944.2	943.4	948.6	943.4
177.5°	950.8	947.1	947.1	952.2	946.4
180°	949.3	949.3	949.3	949.3	949.3

(END OF REPORT)