

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: P1025465

Luminaire Tested: S124DIP-B350D810UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025465
REPORT IS A COMBINATION OF REPORTS P996005 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

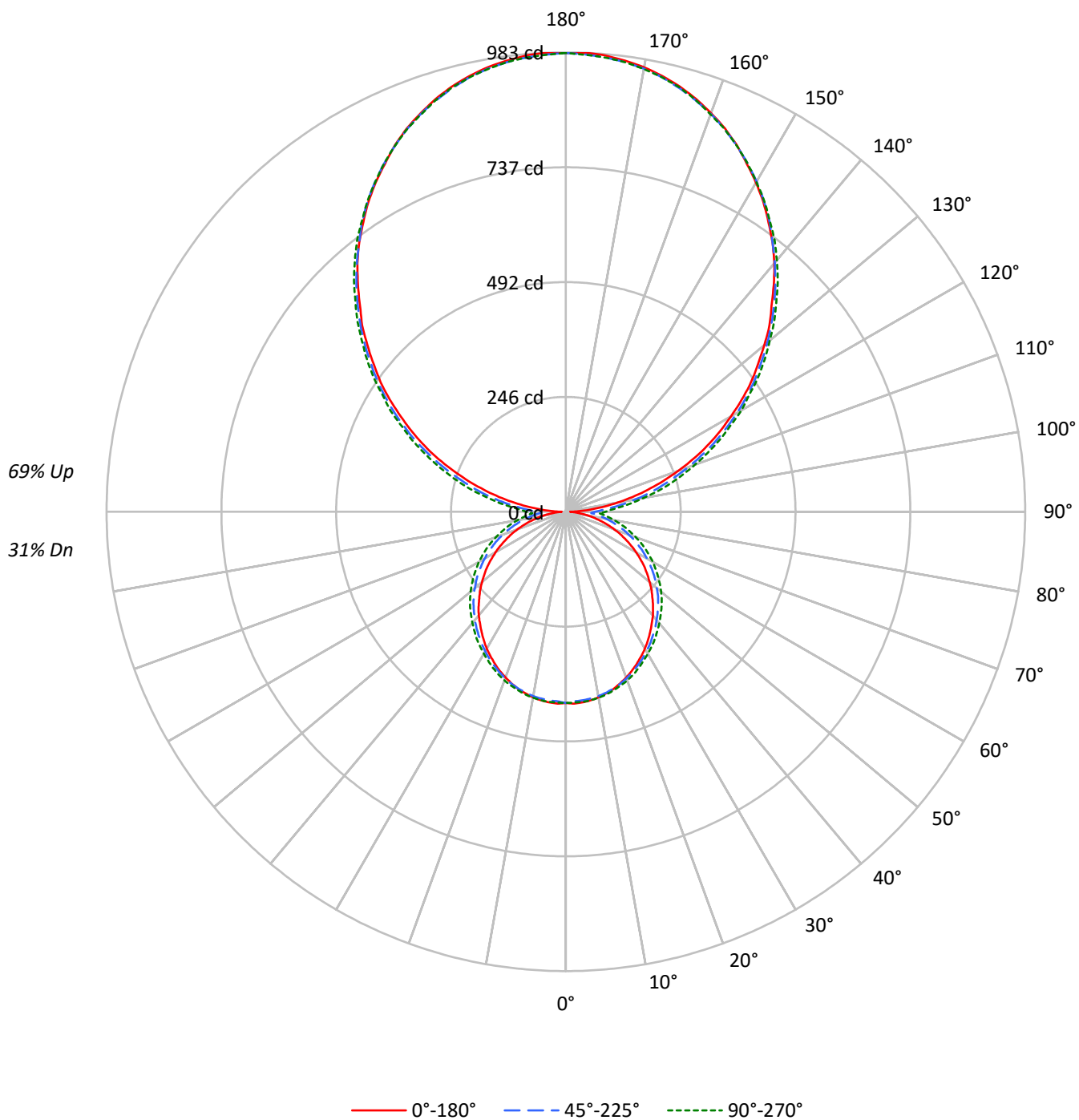
Lumens per Lamp: N/A
Luminaire Lumens: 4121.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
Input Voltage (V):
Input Current (A_{in}): 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: P1025465

CATALOG NUMBER: S124DIP-B350D810UB40-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1025465

CATALOG NUMBER: S124DIP-B350D810UB40-4F0-XX-W2A-D1

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	92	92	92	92	73	73	73	55	55	55	39	39	39
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	33	32	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26
3	77	67	60	54	69	61	54	49	48	43	40	36	33	31	25	24	22
4	70	59	51	45	63	53	47	41	42	37	34	32	29	26	23	20	19
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3131 cd/sqm

TEST NUMBER: P1025465

CATALOG NUMBER: S124DIP-B350D810UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.9
10°-20°	111.1	2.7
20°-30°	168.0	4.1
30°-40°	203.2	4.9
40°-50°	214.8	5.2
50°-60°	202.2	4.9
60°-70°	167.7	4.1
70°-80°	117.7	2.9
80°-90°	68.5	1.7
90°-100°	103.5	2.5
100°-110°	220.9	5.4
110°-120°	345.2	8.4
120°-130°	440.5	10.7
130°-140°	487.1	11.8
140°-150°	475.0	11.5
150°-160°	398.7	9.7
160°-170°	265.3	6.4
170°-180°	92.9	2.3
0°-30°	317.8	7.7
0°-40°	521.0	12.6
0°-60°	938.0	22.8
0°-90°	1291.9	31.3
90°-120°	669.7	16.3
90°-150°	2072.2	50.3
90°-180°	2829.0	68.6
0°-180°	4121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	10	36	62	80	85	8
95°	52	74	98	112	116	54
105°	181	191	211	225	231	192
115°	334	338	351	360	363	329
125°	484	484	494	501	503	432
135°	623	627	630	636	637	482
145°	756	758	759	761	761	473
155°	866	866	865	868	865	398
165°	942	940	938	943	940	266
175°	980	976	976	981	976	93
180°	982	982	982	982	982	

TEST NUMBER: P1025465

CATALOG NUMBER: S124DIP-B350D810UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	9.6	36.3	62.1	79.9	85.1
92.5°	26.6	52.5	76.0	91.1	95.5
95°	51.6	73.5	97.6	112.2	116.4
97.5°	78.4	97.8	122.6	137.6	141.7
100°	111.3	126.3	151.0	164.9	168.1
102.5°	146.2	157.1	180.6	194.7	199.2
105°	181.0	191.0	210.9	224.7	230.7
107.5°	218.2	226.8	243.5	258.1	260.5
110°	255.8	263.7	278.9	288.0	293.9

TEST NUMBER: P1025465

CATALOG NUMBER: S124DIP-B350D810UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	294.8	300.3	313.8	323.9	327.6
115°	333.7	337.9	351.0	360.4	362.8
117.5°	370.9	373.7	386.7	394.1	395.4
120°	407.7	412.2	423.2	428.5	433.7
122.5°	446.5	447.2	458.9	465.7	465.1
125°	483.9	483.5	494.2	501.3	502.6
127.5°	518.1	520.0	527.6	534.3	536.8
130°	554.1	555.9	563.2	570.0	569.7
132.5°	591.3	592.4	597.1	603.4	605.4
135°	622.7	627.3	630.5	636.4	636.8
137.5°	658.4	660.3	663.6	668.2	671.3
140°	694.1	695.2	695.6	700.9	702.4
142.5°	726.3	727.9	726.6	731.6	733.5
145°	756.0	758.5	759.3	761.2	760.8
147.5°	786.3	789.6	788.9	788.6	789.6
150°	813.7	816.2	816.2	816.2	815.4
152.5°	839.0	840.5	841.3	843.5	841.3
155°	865.6	865.6	864.8	867.8	864.8
157.5°	888.3	886.8	886.8	889.1	886.8
160°	908.1	907.3	906.5	908.8	905.0
162.5°	926.3	924.0	923.3	927.8	924.0
165°	942.2	940.0	938.4	943.0	940.0
167.5°	955.1	952.1	952.1	956.7	952.1
170°	965.8	962.0	962.7	967.3	962.0
172.5°	973.4	970.3	970.3	975.6	970.3
175°	980.2	976.4	975.6	981.0	975.6
177.5°	983.2	979.4	979.4	984.8	978.7
180°	981.7	981.7	981.7	981.7	981.7

(END OF REPORT)