

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: P1025460

Luminaire Tested: S124DIP-B350D810UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025460
REPORT IS A COMBINATION OF REPORTS P996000 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB35-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

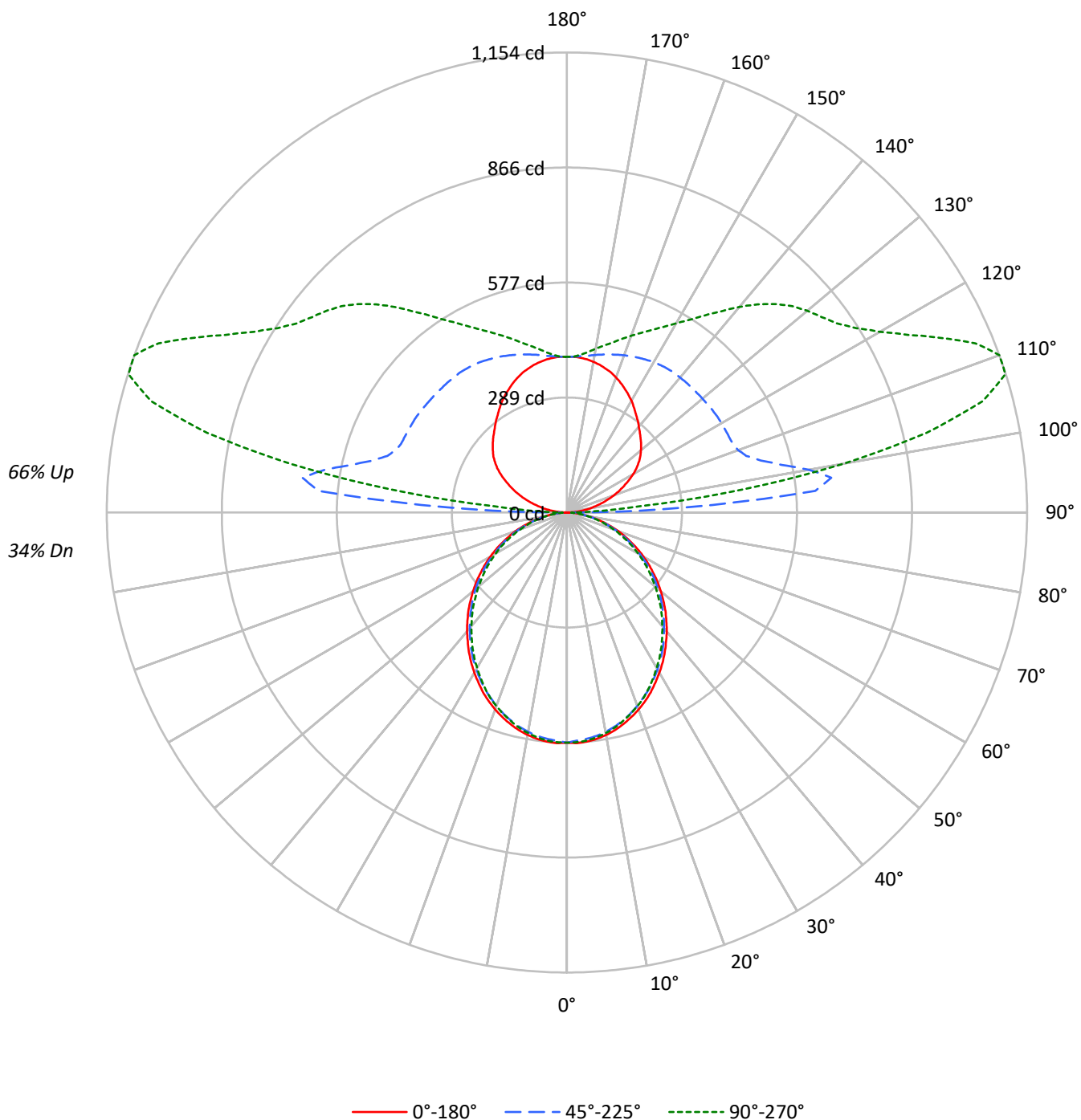
Lumens per Lamp: N/A
Luminaire Lumens: 4332.7 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1025460

CATALOG NUMBER: S124DIP-B350D810UB35-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1025460

CATALOG NUMBER: S124DIP-B350D810UB35-4F0-XX-W2A-F4

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	75	75	75	57	57	57	42	42	42
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	50	44	42	40	32	31	30
3	78	69	62	56	70	63	56	51	50	46	42	39	36	34	29	27	25
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	26	23	22
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	17
7	56	44	36	31	50	40	33	28	32	27	24	26	22	19	19	17	15
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3930 cd/sqm

TEST NUMBER: P1025460

CATALOG NUMBER: S124DIP-B350D810UB35-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.3
10°-20°	153.3	3.5
20°-30°	225.7	5.2
30°-40°	262.3	6.1
40°-50°	262.3	6.1
50°-60°	229.4	5.3
60°-70°	170.3	3.9
70°-80°	96.6	2.2
80°-90°	29.2	0.7
90°-100°	290.0	6.7
100°-110°	589.8	13.6
110°-120°	525.7	12.1
120°-130°	441.6	10.2
130°-140°	368.5	8.5
140°-150°	281.4	6.5
150°-160°	197.8	4.6
160°-170°	116.4	2.7
170°-180°	37.8	0.9
0°-30°	433.4	10.0
0°-40°	695.7	16.1
0°-60°	1187.4	27.4
0°-90°	1483.5	34.2
90°-120°	1405.6	32.4
90°-150°	2497.2	57.6
90°-180°	2849.0	65.8
0°-180°	4332.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	1	6	14	15	16	3
95°	25	80	625	310	187	28
105°	90	130	503	1083	1079	96
115°	158	198	449	862	1036	157
125°	220	262	446	734	827	196
135°	262	311	443	651	739	202
145°	301	345	440	549	604	189
155°	343	370	428	485	506	158
165°	374	385	410	434	441	106
175°	390	390	394	399	397	37
180°	390	390	390	390	390	

TEST NUMBER: P1025460

CATALOG NUMBER: S124DIP-B350D810UB35-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	0.8	6.1	13.8	15.3	16.1
92.5°	10.7	59.0	300.7	99.3	69.8
95°	25.3	79.8	625.1	309.5	187.2
97.5°	42.2	88.2	668.8	632.0	449.5
100°	58.3	99.7	616.7	874.4	703.4
102.5°	73.6	113.5	551.5	1026.2	924.3
105°	89.7	130.0	503.2	1083.4	1079.2
107.5°	107.4	146.9	471.7	1066.2	1152.8
110°	125.0	163.8	457.1	1004.8	1154.4

TEST NUMBER: P1025460

CATALOG NUMBER: S124DIP-B350D810UB35-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.9	180.6	450.2	929.6	1109.1
115°	158.0	198.2	448.7	862.1	1036.2
117.5°	174.9	214.8	447.9	809.2	964.9
120°	191.8	230.8	447.9	773.6	906.6
122.5°	207.1	246.6	447.2	750.2	860.6
125°	220.1	261.6	446.4	733.7	826.8
127.5°	232.4	275.4	444.9	718.0	805.4
130°	242.4	288.8	444.1	699.2	787.0
132.5°	252.3	300.2	443.3	676.9	766.2
135°	261.6	311.4	442.6	651.2	739.4
137.5°	270.8	321.0	442.6	623.6	708.0
140°	280.7	329.8	441.8	596.7	673.4
142.5°	291.5	337.8	441.8	571.8	636.6
145°	301.4	345.2	440.3	549.2	603.6
147.5°	312.9	352.0	438.0	530.4	573.0
150°	323.7	358.6	435.7	513.1	547.6
152.5°	333.7	364.7	431.8	498.6	524.6
155°	342.9	370.0	428.0	484.8	505.5
157.5°	352.1	375.1	424.2	471.8	487.8
160°	360.5	379.3	419.6	458.6	471.7
162.5°	368.2	382.8	415.0	446.0	456.4
165°	373.5	385.0	410.4	434.5	441.0
167.5°	379.7	387.0	405.8	424.6	428.8
170°	383.5	388.5	401.1	414.6	417.3
172.5°	387.3	389.6	396.5	405.8	405.8
175°	389.6	390.4	393.5	398.8	397.3
177.5°	391.2	390.4	391.2	393.8	391.2
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)