

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: P1025456

Luminaire Tested: S124DIP-B350D810UB35-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025456
REPORT IS A COMBINATION OF REPORTS P995996 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-D1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

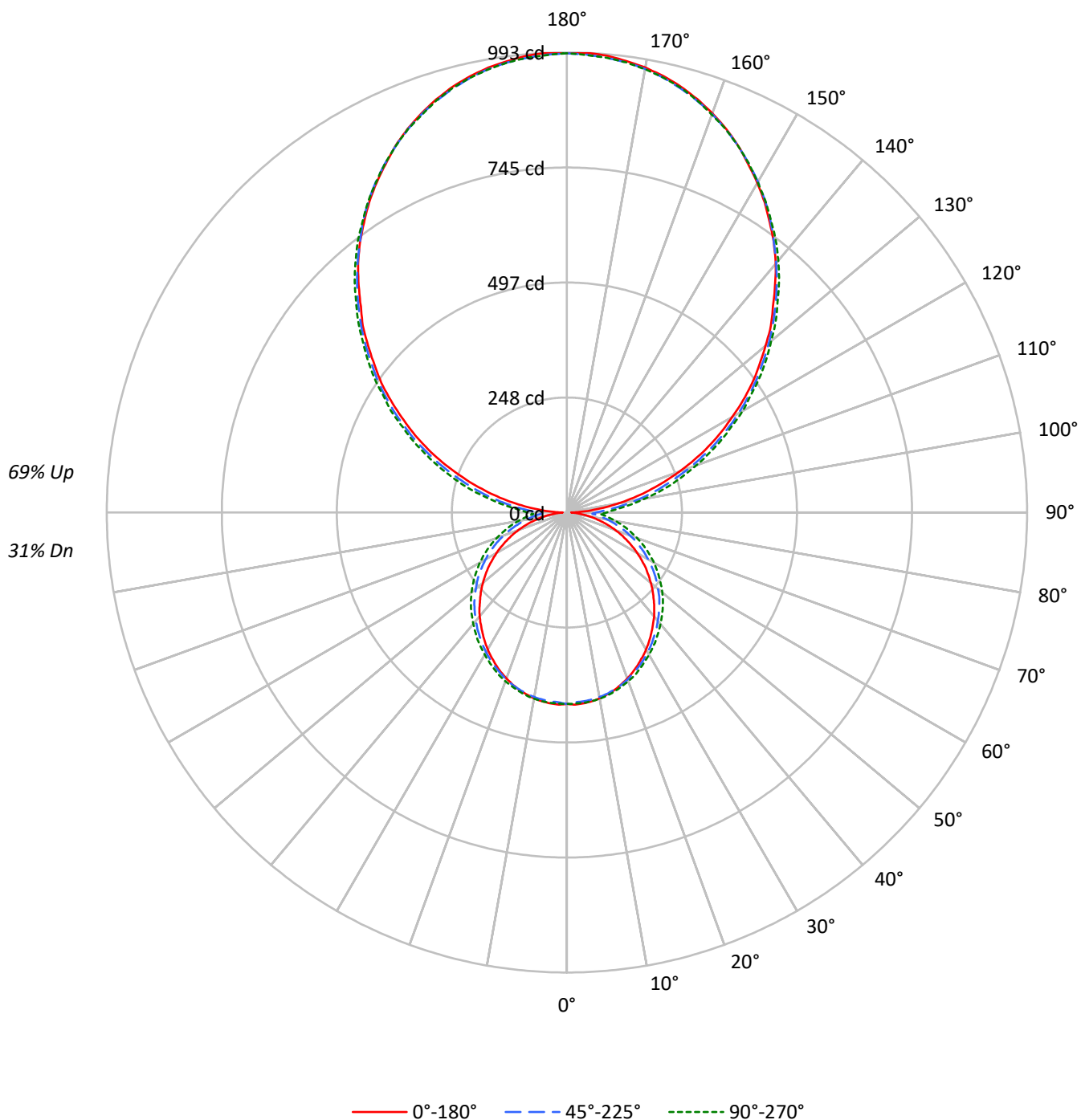
Lumens per Lamp: N/A
Luminaire Lumens: 4162.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
Input Voltage (V):
Input Current (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

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Luminous Intensity Polar Plot



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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°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3164 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.9
10°-20°	112.2	2.7
20°-30°	169.6	4.1
30°-40°	205.2	4.9
40°-50°	217.0	5.2
50°-60°	204.2	4.9
60°-70°	169.4	4.1
70°-80°	118.9	2.9
80°-90°	69.2	1.7
90°-100°	104.5	2.5
100°-110°	223.1	5.4
110°-120°	348.7	8.4
120°-130°	444.8	10.7
130°-140°	491.9	11.8
140°-150°	479.7	11.5
150°-160°	402.7	9.7
160°-170°	267.9	6.4
170°-180°	93.8	2.3
0°-30°	321.0	7.7
0°-40°	526.2	12.6
0°-60°	947.4	22.8
0°-90°	1304.9	31.4
90°-120°	676.3	16.2
90°-150°	2092.8	50.3
90°-180°	2857.0	68.6
0°-180°	4162.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	10	37	63	81	86	8
95°	52	74	99	113	118	55
105°	183	193	213	227	233	194
115°	337	341	355	364	366	333
125°	489	488	499	506	508	436
135°	629	634	637	643	643	487
145°	763	766	767	769	768	478
155°	874	874	873	876	873	402
165°	952	949	948	952	949	268
175°	990	986	985	991	985	94
180°	991	991	991	991	991	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	9.7	36.6	62.7	80.7	85.9
92.5°	26.8	53.0	76.7	92.0	96.5
95°	52.0	74.2	98.6	113.4	117.5
97.5°	79.2	98.7	123.8	138.9	143.0
100°	112.4	127.5	152.5	166.6	169.8
102.5°	147.7	158.7	182.4	196.7	201.2
105°	182.9	192.8	213.0	226.9	232.9
107.5°	220.4	229.0	246.0	260.6	263.1
110°	258.3	266.3	281.7	290.8	296.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	297.6	303.2	317.0	327.1	330.8
115°	337.1	341.2	354.6	363.9	366.4
117.5°	374.7	377.5	390.5	398.0	399.4
120°	411.8	416.2	427.3	432.8	438.0
122.5°	450.9	451.6	463.4	470.4	469.7
125°	488.8	488.3	499.1	506.4	507.6
127.5°	523.3	525.1	532.8	539.6	542.1
130°	559.6	561.4	568.8	575.7	575.3
132.5°	597.2	598.2	603.1	609.3	611.4
135°	628.9	633.5	636.8	642.7	643.1
137.5°	664.9	666.8	670.2	674.9	677.9
140°	701.0	702.1	702.5	707.7	709.4
142.5°	733.5	735.1	733.8	738.9	740.7
145°	763.4	766.0	766.8	768.8	768.3
147.5°	794.1	797.4	796.7	796.4	797.4
150°	821.7	824.3	824.3	824.3	823.5
152.5°	847.3	848.8	849.6	851.9	849.6
155°	874.1	874.1	873.4	876.4	873.4
157.5°	897.1	895.6	895.6	897.9	895.6
160°	917.1	916.3	915.5	917.8	914.0
162.5°	935.5	933.2	932.4	937.0	933.2
165°	951.6	949.3	947.7	952.3	949.3
167.5°	964.6	961.5	961.5	966.1	961.5
170°	975.3	971.5	972.3	976.9	971.5
172.5°	983.0	979.9	979.9	985.3	979.9
175°	989.9	986.1	985.3	990.7	985.3
177.5°	993.0	989.1	989.1	994.5	988.4
180°	991.4	991.4	991.4	991.4	991.4

(END OF REPORT)