

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: P1026378

Luminaire Tested: S124RDIP-B350D810UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026378
REPORT IS A COMBINATION OF REPORTS P999418 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-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

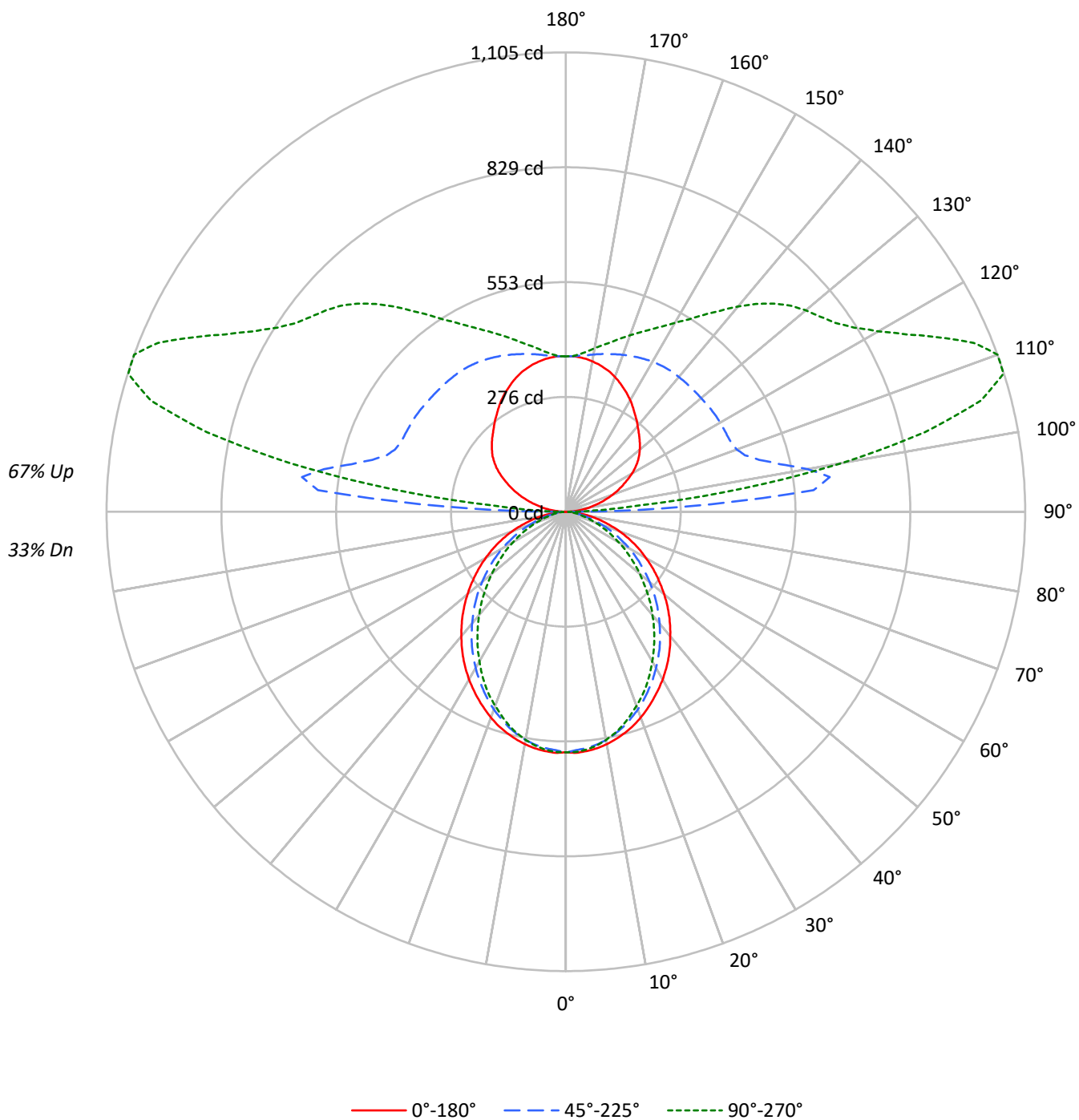
Lumens per Lamp: N/A
Luminaire Lumens: 4066.4 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1026378

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1026378

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-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	74	74	74	56	56	56	40	40	40
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	30	29
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25
4	72	61	54	48	64	56	49	44	45	40	36	35	32	29	25	23	22
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19
6	61	49	41	36	54	44	38	33	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13
9	48	36	29	24	43	33	27	23	27	22	19	22	18	16	16	14	12
10	45	33	26	22	41	30	24	20	25	20	17	20	16	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: P1026378

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.3
10°-20°	151.7	3.7
20°-30°	219.0	5.4
30°-40°	248.2	6.1
40°-50°	239.7	5.9
50°-60°	199.3	4.9
60°-70°	137.5	3.4
70°-80°	69.5	1.7
80°-90°	19.1	0.5
90°-100°	277.7	6.8
100°-110°	564.7	13.9
110°-120°	503.4	12.4
120°-130°	422.8	10.4
130°-140°	352.9	8.7
140°-150°	269.5	6.6
150°-160°	189.4	4.7
160°-170°	111.4	2.7
170°-180°	36.2	0.9
0°-30°	425.2	10.5
0°-40°	673.4	16.6
0°-60°	1112.3	27.4
0°-90°	1338.4	32.9
90°-120°	1345.8	33.1
90°-150°	2390.9	58.8
90°-180°	2728.0	67.1
0°-180°	4066.4	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°	1	6	13	15	15	3
95°	24	76	598	296	179	27
105°	86	124	482	1037	1033	92
115°	151	190	430	825	992	150
125°	211	250	427	702	792	188
135°	250	298	424	624	708	194
145°	289	330	422	526	578	181
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

TEST NUMBER: P1026378

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F4

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°	0.7	5.9	13.2	14.7	15.4
92.5°	10.3	56.6	287.9	95.1	66.8
95°	24.2	76.4	598.5	296.3	179.2
97.5°	40.4	84.4	640.4	605.2	430.4
100°	55.8	95.4	590.5	837.2	673.4
102.5°	70.5	108.7	528.0	982.6	884.9
105°	85.9	124.4	481.8	1037.4	1033.3
107.5°	102.8	140.6	451.7	1020.8	1103.8
110°	119.7	156.8	437.7	962.0	1105.3

TEST NUMBER: P1026378

CATALOG NUMBER: S124RDIP-B350D810UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.9	173.0	431.1	890.1	1061.9
115°	151.3	189.9	429.6	825.4	992.2
117.5°	167.4	205.6	428.9	774.8	923.9
120°	183.6	221.0	428.9	740.7	868.1
122.5°	198.3	236.1	428.2	718.2	824.0
125°	210.8	250.4	427.4	702.4	791.7
127.5°	222.5	263.6	425.9	687.4	771.1
130°	232.1	276.5	425.2	669.4	753.5
132.5°	241.6	287.5	424.5	648.1	733.7
135°	250.4	298.2	423.7	623.5	708.0
137.5°	259.2	307.4	423.7	597.1	677.8
140°	268.8	315.8	423.0	571.3	644.8
142.5°	279.1	323.5	423.0	547.4	609.5
145°	288.6	330.5	421.5	525.8	578.0
147.5°	299.6	337.0	419.3	507.8	548.6
150°	309.9	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)