

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: P1034105

Luminaire Tested: S124RDIW-B350D770UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034105
REPORT IS A COMBINATION OF REPORTS P1000459 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D770UB30-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

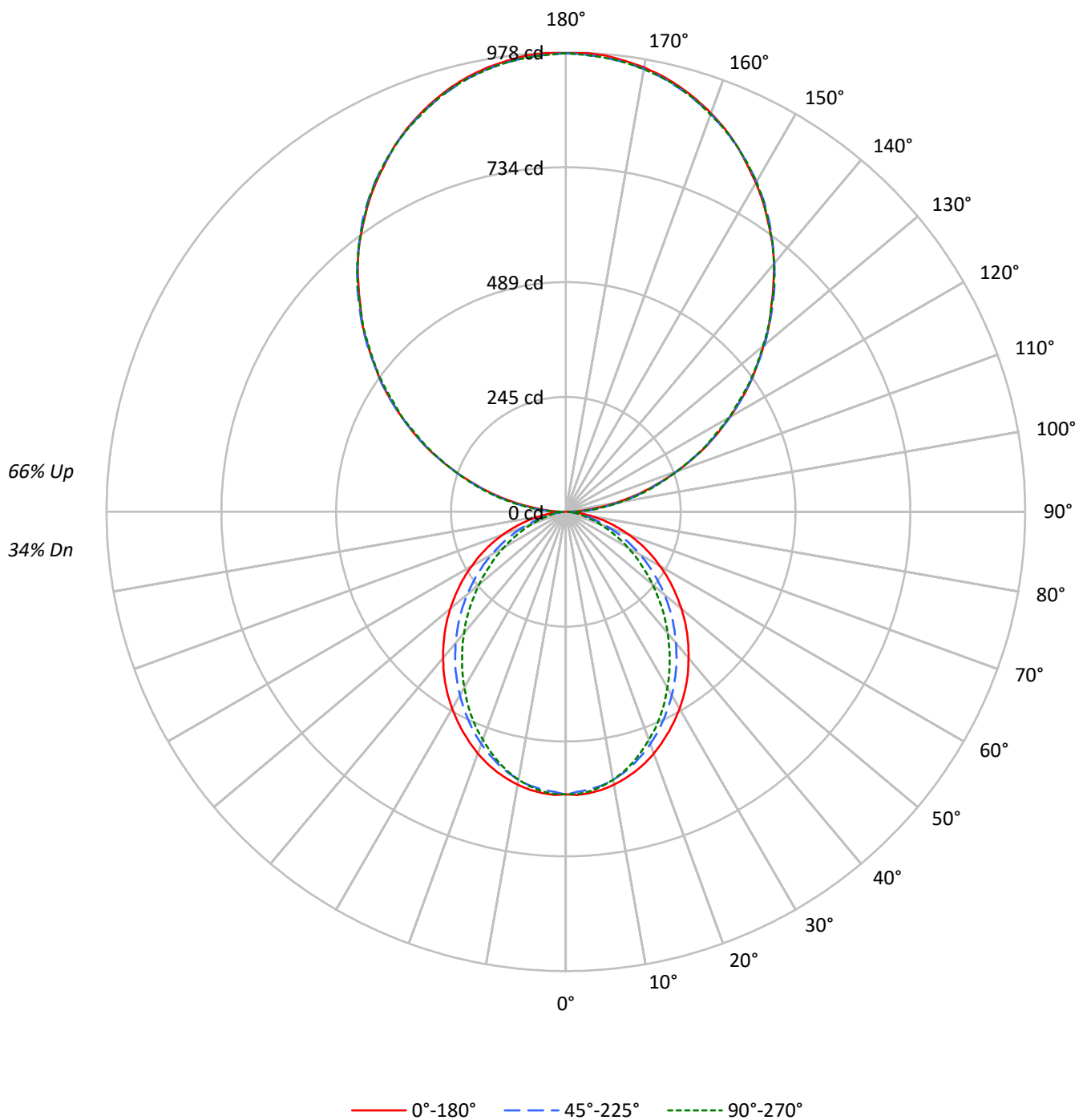
Lumens per Lamp: N/A
Luminaire Lumens: 4101.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
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: P1034105

CATALOG NUMBER: S124RDIW-B350D770UB30-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1034105

CATALOG NUMBER: S124RDIW-B350D770UB30-4F0-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	51	49	48	37	36	35
2	86	79	73	68	77	71	67	62	57	54	51	45	42	40	33	31	30
3	79	69	62	57	71	63	57	52	51	47	43	40	37	34	29	27	26
4	72	62	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	51	40	34	29	33	28	24	26	22	20	20	17	15
8	52	40	33	27	47	37	30	25	30	25	22	24	20	18	18	16	14
9	48	37	29	24	44	33	27	23	27	23	19	22	18	16	17	14	12
10	45	33	26	22	41	31	24	20	25	21	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4906	4906	4906
5°	4906	4760	4761
10°	4865	4610	4555
15°	4798	4422	4312
20°	4710	4209	4036
25°	4601	3979	3766
30°	4493	3744	3463
35°	4376	3507	3166
40°	4236	3251	2862
45°	4104	2996	2560
50°	3956	2719	2254
55°	3794	2435	1938
60°	3614	2133	1626
65°	3441	1786	1325
70°	3197	1423	1012
75°	2882	1035	708
80°	2406	635	510
85°	1812	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4104 cd/sqm

TEST NUMBER: P1034105

CATALOG NUMBER: S124RDIW-B350D770UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.4
10°-20°	157.7	3.8
20°-30°	227.7	5.6
30°-40°	258.1	6.3
40°-50°	249.2	6.1
50°-60°	207.2	5.1
60°-70°	143.0	3.5
70°-80°	72.3	1.8
80°-90°	20.4	0.5
90°-100°	63.6	1.6
100°-110°	190.6	4.6
110°-120°	323.8	7.9
120°-130°	427.1	10.4
130°-140°	479.7	11.7
140°-150°	471.4	11.5
150°-160°	396.5	9.7
160°-170°	263.8	6.4
170°-180°	92.4	2.3
0°-30°	442.0	10.8
0°-40°	700.1	17.1
0°-60°	1156.4	28.2
0°-90°	1392.1	33.9
90°-120°	578.0	14.1
90°-150°	1956.2	47.7
90°-180°	2709.0	66.1
0°-180°	4101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	601	599	593	598	597	57
15°	572	568	556	556	552	161
25°	517	509	490	482	478	238
35°	447	432	410	394	386	280
45°	365	348	320	298	289	281
55°	276	258	228	204	195	247
65°	188	168	139	119	113	186
75°	100	83	61	51	48	105
85°	25	16	14	13	13	27
90°	2	11	17	21	23	5
95°	45	52	57	60	60	49
105°	176	177	180	182	184	187
115°	329	329	328	327	326	325
125°	480	480	479	477	476	427
135°	618	623	623	621	619	478
145°	751	754	755	754	752	470
155°	861	861	860	863	860	396
165°	937	935	933	938	935	264
175°	975	971	970	976	970	93
180°	976	976	976	976	976	

TEST NUMBER: P1034105

CATALOG NUMBER: S124RDIW-B350D770UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.6	601.6	601.6	601.6	601.6
2.5°	603.4	601.6	596.5	601.6	601.1
5°	600.7	598.8	593.3	597.9	597.0
7.5°	596.5	594.7	587.8	591.0	589.6
10°	590.1	587.8	579.5	581.3	579.5
12.5°	581.8	579.0	568.9	569.8	567.0
15°	572.1	567.9	556.4	555.5	552.3
17.5°	561.0	555.1	541.7	539.4	534.8
20°	547.7	541.7	526.0	522.3	516.4
22.5°	532.9	526.0	509.0	503.0	498.4
25°	517.3	509.0	490.1	482.3	477.7
27.5°	501.2	491.0	471.2	462.0	455.6
30°	484.1	472.6	450.9	439.4	432.1
32.5°	466.2	452.8	430.2	416.4	409.5
35°	447.3	432.5	409.5	393.8	385.5
37.5°	427.5	412.3	386.9	369.9	361.6
40°	406.3	391.1	364.8	345.5	337.2
42.5°	386.0	369.9	342.2	322.4	313.7
45°	364.8	347.8	320.1	297.6	289.3
47.5°	343.2	325.7	297.1	273.6	264.4
50°	321.1	303.1	273.6	250.6	241.8
52.5°	298.5	281.0	250.6	227.1	217.9
55°	276.4	257.9	228.0	204.1	195.3
57.5°	254.7	235.4	205.9	181.5	175.0
60°	231.2	212.8	183.3	159.4	152.0
62.5°	210.0	190.7	160.3	138.6	133.1
65°	187.9	168.1	138.6	118.8	113.3
67.5°	164.9	146.0	118.4	100.9	94.4
70°	143.3	123.9	97.7	82.5	77.8
72.5°	120.2	103.2	78.8	66.3	62.2
75°	100.0	82.9	61.3	50.7	47.9
77.5°	78.8	64.0	45.6	38.2	37.3
80°	58.5	45.1	31.3	29.9	29.5
82.5°	41.0	29.0	22.6	21.6	21.2
85°	24.9	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.4	6.0	6.4
90°	2.3	10.6	16.6	21.1	22.7
92.5°	19.6	29.4	33.2	35.5	36.2
95°	45.3	52.1	57.4	59.7	59.7
97.5°	72.5	78.5	84.6	87.6	87.6
100°	105.7	108.7	115.5	117.0	117.0
102.5°	140.4	141.2	147.2	149.5	150.3
105°	175.9	176.7	179.7	182.0	184.2
107.5°	212.9	213.7	214.4	217.5	216.7
110°	250.7	252.2	251.4	249.9	252.2

TEST NUMBER: P1034105

CATALOG NUMBER: S124RDIW-B350D770UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	289.9	289.9	288.4	288.4	288.4
115°	329.2	329.2	327.7	326.9	326.2
117.5°	366.2	366.2	365.5	363.2	360.9
120°	403.2	406.2	404.0	400.2	401.7
122.5°	441.7	442.5	441.7	439.5	435.7
125°	479.5	479.5	478.7	477.2	475.7
127.5°	513.5	515.7	514.2	512.7	511.9
130°	549.7	552.0	552.0	550.5	547.4
132.5°	586.7	588.2	587.4	585.9	585.2
135°	618.4	622.9	622.9	621.4	619.2
137.5°	653.9	656.2	657.7	655.4	656.2
140°	689.4	690.9	690.9	690.1	689.4
142.5°	721.9	723.4	722.6	722.6	722.6
145°	751.3	754.3	755.1	754.3	752.1
147.5°	781.5	785.3	784.5	783.8	783.0
150°	808.7	811.7	811.7	811.7	811.0
152.5°	834.4	835.9	836.6	838.9	836.6
155°	860.8	860.8	860.0	863.1	860.0
157.5°	883.4	881.9	881.9	884.2	881.9
160°	903.1	902.3	901.6	903.8	900.1
162.5°	921.2	918.9	918.2	922.7	918.9
165°	937.1	934.8	933.3	937.8	934.8
167.5°	949.9	946.9	946.9	951.4	946.9
170°	960.5	956.7	957.4	962.0	956.7
172.5°	968.0	965.0	965.0	970.3	965.0
175°	974.8	971.0	970.3	975.6	970.3
177.5°	977.8	974.0	974.0	979.3	973.3
180°	976.3	976.3	976.3	976.3	976.3

(END OF REPORT)