

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: P1032987

Luminaire Tested: S124RDIW-B350D770UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032987
REPORT IS A COMBINATION OF REPORTS P1000452 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D770UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

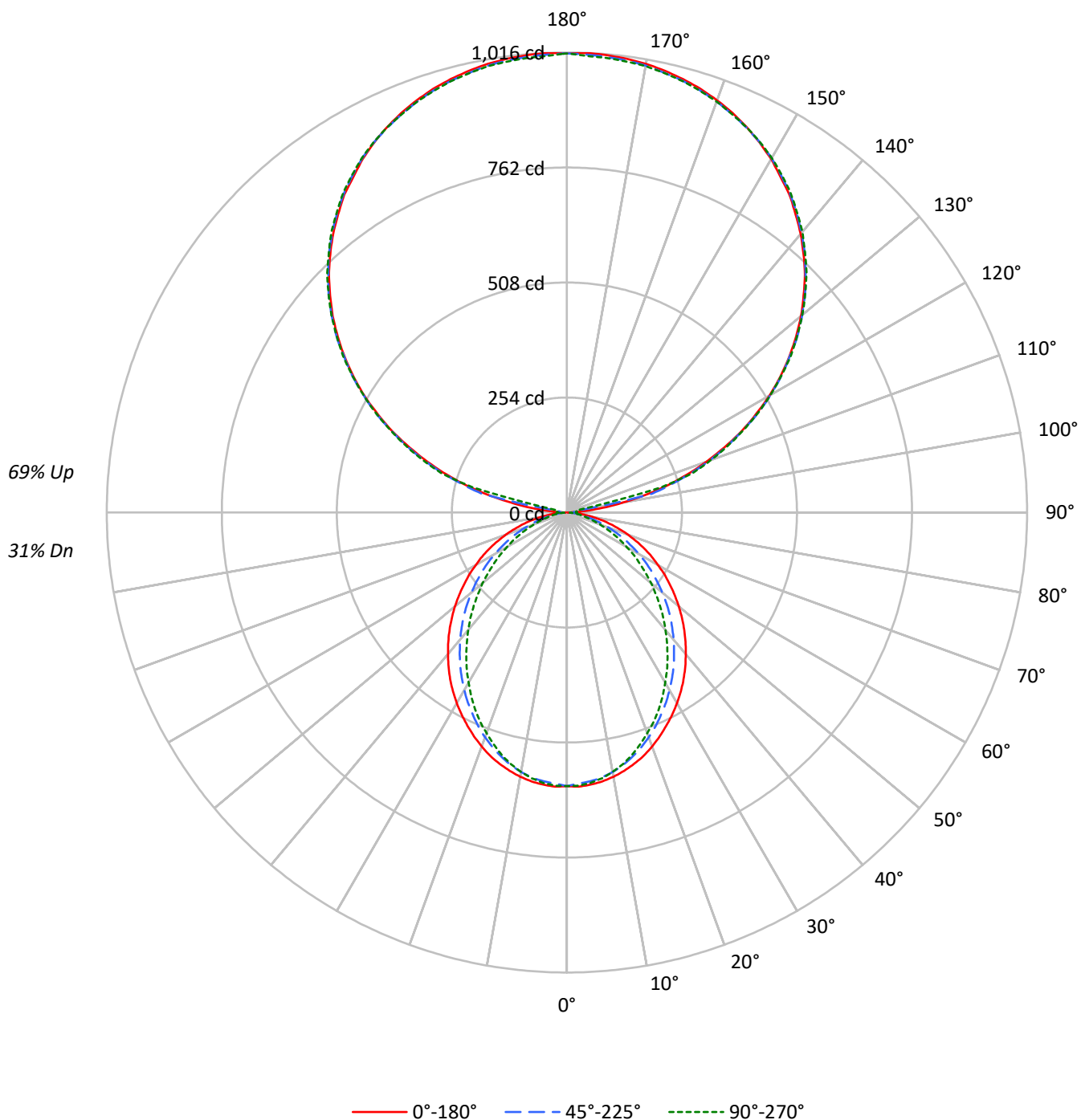
Lumens per Lamp: N/A
Luminaire Lumens: 4535.0 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	94	90	86	82	84	81	77	75	64	62	60	48	47	46	34	34	33
2	85	78	72	68	76	71	66	61	56	53	50	43	40	39	30	29	28
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	27	25	24
4	71	61	53	48	64	55	49	44	44	39	36	34	31	28	24	22	21
5	65	54	46	41	59	49	42	37	39	35	31	30	27	24	22	20	18
6	60	49	41	35	54	44	37	32	35	30	27	27	24	21	20	18	16
7	56	44	36	31	50	40	33	28	32	27	24	25	21	19	18	16	14
8	51	40	32	27	46	36	30	25	29	24	21	23	19	17	17	14	13
9	48	36	29	24	43	33	27	22	27	22	19	21	17	15	15	13	11
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4927	4927	4927
5°	4927	4780	4781
10°	4885	4630	4575
15°	4819	4441	4331
20°	4730	4228	4053
25°	4620	3996	3782
30°	4513	3761	3477
35°	4395	3522	3180
40°	4254	3265	2874
45°	4122	3010	2571
50°	3972	2731	2264
55°	3811	2446	1946
60°	3630	2142	1633
65°	3456	1794	1331
70°	3210	1429	1017
75°	2893	1039	711
80°	2418	639	511
85°	1819	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.3
10°-20°	158.4	3.5
20°-30°	228.7	5.0
30°-40°	259.2	5.7
40°-50°	250.3	5.5
50°-60°	208.1	4.6
60°-70°	143.6	3.2
70°-80°	72.6	1.6
80°-90°	20.5	0.5
90°-100°	33.7	0.7
100°-110°	221.6	4.9
110°-120°	423.2	9.3
120°-130°	537.2	11.8
130°-140°	574.7	12.7
140°-150°	537.4	11.8
150°-160°	433.4	9.6
160°-170°	279.5	6.2
170°-180°	96.3	2.1
0°-30°	443.9	9.8
0°-40°	703.1	15.5
0°-60°	1161.4	25.6
0°-90°	1398.1	30.8
90°-120°	678.5	15.0
90°-150°	2327.8	51.3
90°-180°	3137.0	69.2
0°-180°	4535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	603	601	596	600	600	57
15°	575	570	559	558	555	162
25°	520	511	492	484	480	239
35°	449	434	411	396	387	281
45°	366	349	322	299	290	283
55°	278	259	229	205	196	248
65°	189	169	139	119	114	186
75°	100	83	62	51	48	106
85°	25	16	14	13	13	27
90°	2	11	17	21	23	4
95°	42	16	17	21	22	51
105°	228	233	237	243	216	239
115°	426	428	428	429	429	419
125°	599	602	600	603	604	535
135°	743	742	745	747	748	573
145°	857	859	859	860	861	535
155°	939	940	938	941	939	433
165°	991	987	987	993	986	280
175°	1014	1009	1010	1017	1008	97
180°	1014	1014	1014	1014	1014	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.2	604.2	604.2	604.2	604.2
2.5°	606.0	604.2	599.1	604.2	603.7
5°	603.2	601.4	595.8	600.5	599.5
7.5°	599.1	597.2	590.3	593.5	592.1
10°	592.6	590.3	582.0	583.8	582.0
12.5°	584.3	581.5	571.3	572.3	569.5
15°	574.6	570.4	558.8	557.9	554.7
17.5°	563.5	557.4	544.0	541.7	537.1
20°	550.0	544.0	528.3	524.6	518.6
22.5°	535.2	528.3	511.2	505.2	500.5
25°	519.5	511.2	492.2	484.4	479.7
27.5°	503.3	493.1	473.3	464.0	457.5
30°	486.2	474.6	452.9	441.3	433.9
32.5°	468.2	454.7	432.1	418.2	411.3
35°	449.2	434.4	411.3	395.5	387.2
37.5°	429.3	414.0	388.6	371.5	363.1
40°	408.0	392.8	366.4	347.0	338.6
42.5°	387.7	371.5	343.7	323.8	315.0
45°	366.4	349.3	321.5	298.8	290.5
47.5°	344.6	327.1	298.4	274.8	265.5
50°	322.4	304.4	274.8	251.7	242.9
52.5°	299.8	282.2	251.7	228.1	218.8
55°	277.6	259.1	229.0	204.9	196.1
57.5°	255.8	236.4	206.8	182.3	175.8
60°	232.2	213.7	184.1	160.1	152.7
62.5°	211.0	191.5	161.0	139.2	133.7
65°	188.7	168.9	139.2	119.4	113.8
67.5°	165.6	146.6	118.9	101.3	94.8
70°	143.9	124.4	98.1	82.8	78.2
72.5°	120.7	103.6	79.1	66.6	62.5
75°	100.4	83.3	61.5	50.9	48.1
77.5°	79.1	64.3	45.8	38.4	37.5
80°	58.8	45.3	31.5	30.1	29.6
82.5°	41.2	29.1	22.7	21.7	21.3
85°	25.0	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.5	6.0	6.5
90°	2.3	10.6	16.7	21.2	22.7
92.5°	11.4	9.9	15.9	20.5	20.5
95°	41.7	15.9	16.7	21.2	22.0
97.5°	79.6	96.3	16.7	20.5	21.2
100°	124.3	138.0	33.4	20.5	21.2
102.5°	174.4	183.5	192.6	22.0	22.0
105°	228.2	232.8	236.6	243.4	216.1
107.5°	277.5	279.8	285.1	288.9	291.9
110°	327.6	329.8	334.4	335.9	338.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.1	380.6	382.1	381.4	384.4
115°	426.1	428.4	427.6	429.2	429.2
117.5°	470.9	473.9	476.2	475.4	475.4
120°	516.4	519.4	518.6	520.1	518.6
122.5°	558.8	560.3	561.8	562.6	561.1
125°	599.0	602.0	600.5	602.8	603.6
127.5°	637.7	638.4	642.2	641.5	640.7
130°	674.8	675.6	677.9	678.6	678.6
132.5°	708.9	710.5	713.5	714.3	713.5
135°	743.1	742.3	745.3	746.9	748.4
137.5°	773.4	773.4	777.2	778.7	777.9
140°	803.0	804.5	806.0	808.3	809.0
142.5°	829.5	832.5	833.3	834.8	834.8
145°	856.8	859.1	859.1	859.8	861.3
147.5°	878.0	882.6	881.8	882.6	883.3
150°	901.5	904.6	903.8	903.8	904.6
152.5°	921.2	923.5	922.0	923.5	922.8
155°	939.4	940.2	937.9	941.0	938.7
157.5°	955.4	955.4	952.3	956.1	952.3
160°	969.0	966.7	966.0	970.5	966.0
162.5°	981.1	978.1	977.4	981.9	976.6
165°	991.0	987.2	987.2	993.3	986.5
167.5°	999.3	995.6	994.8	1001.6	994.0
170°	1006.2	1001.6	1002.4	1008.4	1000.9
172.5°	1010.7	1006.2	1006.9	1013.0	1004.7
175°	1013.8	1009.2	1010.0	1016.8	1007.7
177.5°	1016.0	1010.7	1012.2	1018.3	1009.2
180°	1013.8	1013.8	1013.8	1013.8	1013.8

(END OF REPORT)