

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: P1034117

Luminaire Tested: S124RDIW-B350D770UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034117
REPORT IS A COMBINATION OF REPORTS P1000477 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D770UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

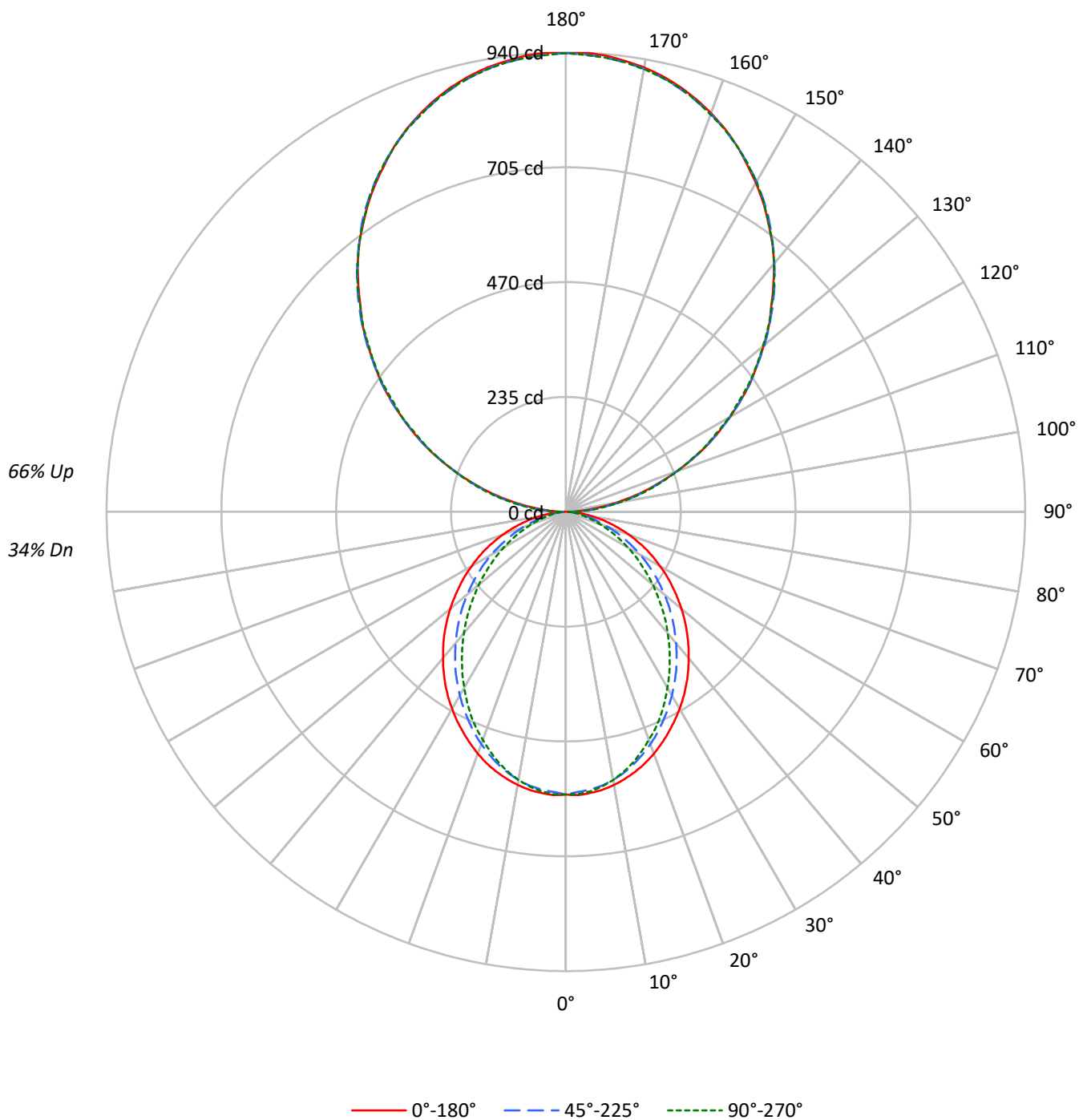
Lumens per Lamp: N/A
Luminaire Lumens: 3942.9 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	87	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	24	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°	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.4
10°-20°	151.7	3.8
20°-30°	219.0	5.6
30°-40°	248.2	6.3
40°-50°	239.7	6.1
50°-60°	199.3	5.1
60°-70°	137.5	3.5
70°-80°	69.5	1.8
80°-90°	19.6	0.5
90°-100°	61.2	1.6
100°-110°	183.2	4.6
110°-120°	311.3	7.9
120°-130°	410.5	10.4
130°-140°	461.1	11.7
140°-150°	453.2	11.5
150°-160°	381.1	9.7
160°-170°	253.6	6.4
170°-180°	88.8	2.3
0°-30°	425.2	10.8
0°-40°	673.4	17.1
0°-60°	1112.3	28.2
0°-90°	1339.0	34.0
90°-120°	555.7	14.1
90°-150°	1880.4	47.7
90°-180°	2604.0	66.0
0°-180°	3942.9	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°	2	10	16	20	22	5
95°	44	50	55	57	57	47
105°	169	170	173	175	177	179
115°	316	316	315	314	314	312
125°	461	461	460	459	457	411
135°	594	599	599	597	595	460
145°	722	725	726	725	723	452
155°	827	827	827	830	827	381
165°	901	899	897	902	899	254
175°	937	933	933	938	933	89
180°	938	938	938	938	938	

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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°	2.2	10.2	16.0	20.3	21.8
92.5°	18.9	28.3	31.9	34.1	34.8
95°	43.5	50.1	55.2	57.3	57.3
97.5°	69.7	75.5	81.3	84.2	84.2
100°	101.6	104.5	111.1	112.5	112.5
102.5°	135.0	135.7	141.5	143.7	144.4
105°	169.1	169.8	172.7	174.9	177.1
107.5°	204.7	205.4	206.1	209.0	208.3
110°	241.0	242.4	241.7	240.3	242.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	278.7	278.7	277.3	277.3	277.3
115°	316.5	316.5	315.0	314.3	313.6
117.5°	352.0	352.0	351.3	349.1	346.9
120°	387.6	390.5	388.3	384.7	386.1
122.5°	424.6	425.3	424.6	422.4	418.8
125°	460.9	460.9	460.2	458.7	457.3
127.5°	493.6	495.7	494.3	492.8	492.1
130°	528.4	530.6	530.6	529.1	526.2
132.5°	564.0	565.4	564.7	563.2	562.5
135°	594.5	598.8	598.8	597.4	595.2
137.5°	628.6	630.7	632.2	630.0	630.7
140°	662.7	664.1	664.1	663.4	662.7
142.5°	693.9	695.3	694.6	694.6	694.6
145°	722.2	725.1	725.8	725.1	722.9
147.5°	751.2	754.9	754.1	753.4	752.7
150°	777.4	780.3	780.3	780.3	779.5
152.5°	802.0	803.5	804.2	806.4	804.2
155°	827.4	827.4	826.7	829.6	826.7
157.5°	849.2	847.8	847.8	849.9	847.8
160°	868.1	867.4	866.6	868.8	865.2
162.5°	885.5	883.3	882.6	887.0	883.3
165°	900.8	898.6	897.1	901.5	898.6
167.5°	913.1	910.2	910.2	914.5	910.2
170°	923.3	919.6	920.4	924.7	919.6
172.5°	930.5	927.6	927.6	932.7	927.6
175°	937.0	933.4	932.7	937.8	932.7
177.5°	940.0	936.3	936.3	941.4	935.6
180°	938.5	938.5	938.5	938.5	938.5

(END OF REPORT)