

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: P1034093

Luminaire Tested: S124RDIW-B350D470UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034093
REPORT IS A COMBINATION OF REPORTS P1000427 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D470UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

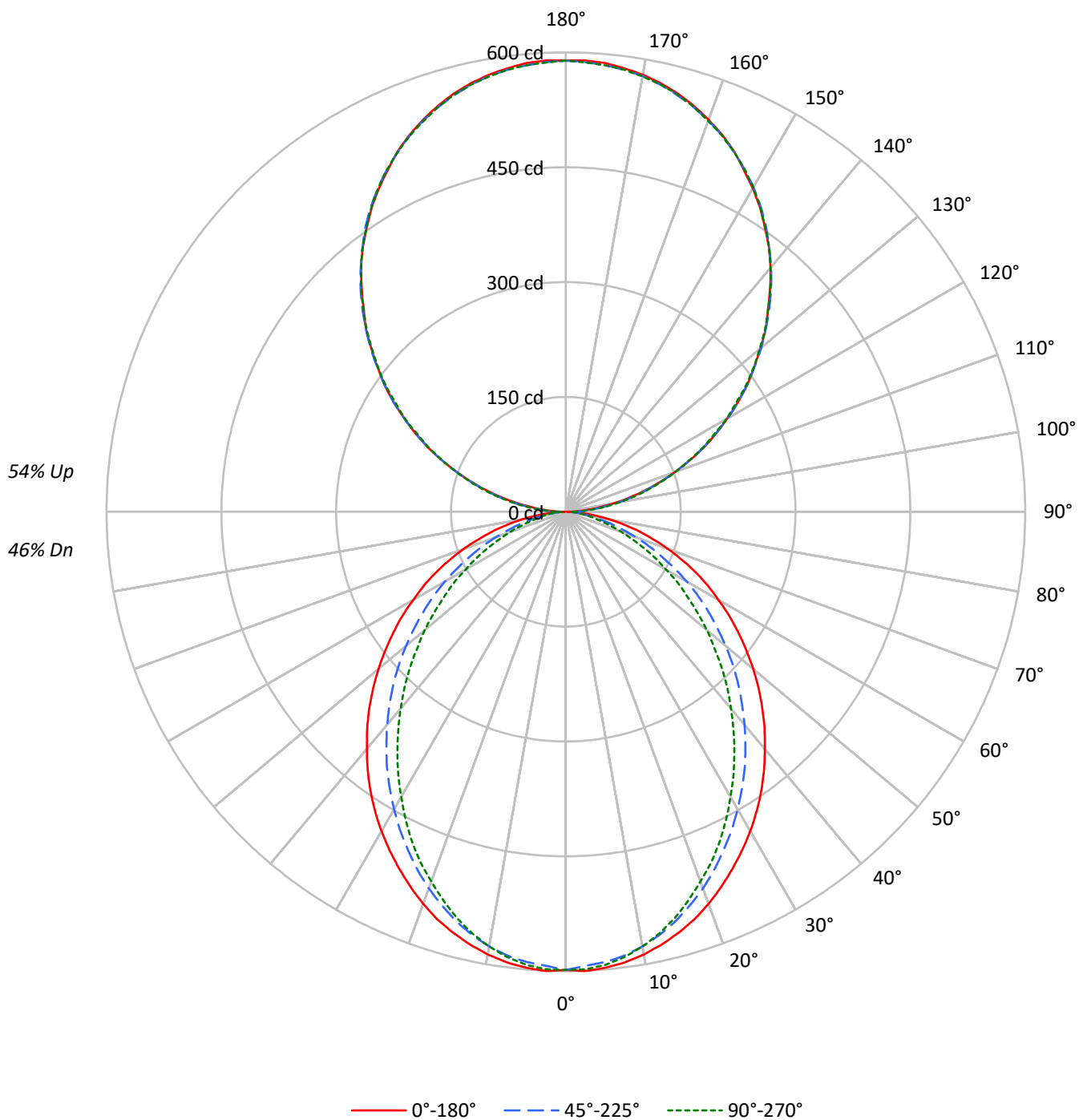
Lumens per Lamp: N/A
Luminaire Lumens: 3019.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	93	89	86	89	85	82	79	71	69	67	59	57	55	47	46	45
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	40	38
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33
4	74	64	56	50	68	59	52	47	50	44	40	41	37	34	33	30	28
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	57	47	40	35	40	35	31	33	29	26	27	24	22
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	20
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	24	30	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4880	4880	4880
5°	4881	4736	4737
10°	4840	4586	4531
15°	4773	4400	4291
20°	4686	4188	4016
25°	4578	3959	3747
30°	4471	3726	3445
35°	4354	3489	3150
40°	4214	3235	2847
45°	4084	2981	2547
50°	3935	2705	2242
55°	3775	2423	1928
60°	3597	2122	1617
65°	3425	1777	1318
70°	3179	1415	1008
75°	2867	1030	705
80°	2394	633	506
85°	1797	364	279

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.9
10°-20°	156.9	5.2
20°-30°	226.6	7.5
30°-40°	256.8	8.5
40°-50°	247.9	8.2
50°-60°	206.1	6.8
60°-70°	142.3	4.7
70°-80°	71.9	2.4
80°-90°	19.5	0.6
90°-100°	38.4	1.3
100°-110°	115.0	3.8
110°-120°	195.4	6.5
120°-130°	257.7	8.5
130°-140°	289.5	9.6
140°-150°	284.5	9.4
150°-160°	239.3	7.9
160°-170°	159.2	5.3
170°-180°	55.7	1.8
0°-30°	439.8	14.6
0°-40°	696.6	23.1
0°-60°	1150.6	38.1
0°-90°	1384.3	45.9
90°-120°	348.8	11.6
90°-150°	1180.5	39.1
90°-180°	1635.0	54.2
0°-180°	3019.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	596	590	595	594	57
15°	569	565	554	553	550	160
25°	515	506	488	480	475	237
35°	445	430	407	392	384	278
45°	363	346	318	296	288	280
55°	275	257	227	203	194	246
65°	187	167	138	118	113	185
75°	100	82	61	50	48	105
85°	25	16	14	13	13	27
90°	1	6	10	13	14	3
95°	27	31	35	36	36	30
105°	106	107	108	110	111	113
115°	199	199	198	197	197	196
125°	289	289	289	288	287	258
135°	373	376	376	375	374	289
145°	453	455	456	455	454	284
155°	520	520	519	521	519	239
165°	566	564	563	566	564	159
175°	588	586	586	589	586	56
180°	589	589	589	589	589	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	598.5	598.5	598.5	598.5	598.5
2.5°	600.4	598.5	593.5	598.5	598.1
5°	597.6	595.8	590.3	594.9	594.0
7.5°	593.5	591.7	584.8	588.0	586.6
10°	587.1	584.8	576.5	578.4	576.5
12.5°	578.8	576.1	566.0	566.9	564.2
15°	569.2	565.1	553.6	552.7	549.5
17.5°	558.2	552.3	539.0	536.7	532.1
20°	544.9	539.0	523.4	519.7	513.8
22.5°	530.3	523.4	506.4	500.5	495.9
25°	514.7	506.4	487.6	479.8	475.3
27.5°	498.6	488.6	468.8	459.7	453.3
30°	481.7	470.2	448.7	437.2	429.9
32.5°	463.8	450.5	428.1	414.3	407.4
35°	445.0	430.3	407.4	391.8	383.6
37.5°	425.3	410.2	385.0	368.0	359.8
40°	404.2	389.1	363.0	343.7	335.5
42.5°	384.1	368.0	340.5	320.8	312.1
45°	363.0	346.0	318.5	296.1	287.8
47.5°	341.4	324.0	295.6	272.2	263.1
50°	319.4	301.6	272.2	249.3	240.6
52.5°	297.0	279.6	249.3	225.9	216.8
55°	275.0	256.6	226.9	203.0	194.3
57.5°	253.4	234.2	204.9	180.6	174.2
60°	230.1	211.7	182.4	158.6	151.2
62.5°	209.0	189.7	159.5	137.9	132.4
65°	187.0	167.3	137.9	118.2	112.7
67.5°	164.1	145.3	117.8	100.4	94.0
70°	142.5	123.3	97.2	82.0	77.5
72.5°	119.6	102.7	78.4	66.0	61.9
75°	99.5	82.5	61.0	50.4	47.7
77.5°	78.4	63.7	45.4	38.0	37.1
80°	58.2	44.9	31.2	29.8	29.3
82.5°	40.8	28.9	22.5	21.5	21.1
85°	24.7	15.6	14.2	13.3	13.3
87.5°	10.5	6.9	6.4	6.0	6.4
90°	1.4	6.4	10.0	12.8	13.7
92.5°	11.8	17.8	20.0	21.4	21.9
95°	27.3	31.4	34.6	36.0	36.0
97.5°	43.7	47.4	51.0	52.9	52.9
100°	63.8	65.6	69.7	70.6	70.6
102.5°	84.8	85.2	88.9	90.2	90.7
105°	106.2	106.6	108.4	109.8	111.2
107.5°	128.5	129.0	129.4	131.2	130.8
110°	151.3	152.2	151.7	150.8	152.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.0	175.0	174.1	174.1	174.1
115°	198.7	198.7	197.8	197.3	196.8
117.5°	221.0	221.0	220.5	219.2	217.8
120°	243.3	245.1	243.8	241.5	242.4
122.5°	266.6	267.0	266.6	265.2	262.9
125°	289.3	289.3	288.9	288.0	287.1
127.5°	309.9	311.2	310.3	309.4	308.9
130°	331.7	333.1	333.1	332.2	330.4
132.5°	354.1	355.0	354.5	353.6	353.1
135°	373.2	375.9	375.9	375.0	373.6
137.5°	394.6	396.0	396.9	395.5	396.0
140°	416.0	416.9	416.9	416.5	416.0
142.5°	435.6	436.5	436.1	436.1	436.1
145°	453.4	455.2	455.7	455.2	453.8
147.5°	471.6	473.9	473.4	473.0	472.5
150°	488.0	489.8	489.8	489.8	489.4
152.5°	503.5	504.4	504.9	506.2	504.9
155°	519.5	519.5	519.0	520.8	519.0
157.5°	533.1	532.2	532.2	533.6	532.2
160°	545.0	544.5	544.1	545.4	543.2
162.5°	555.9	554.5	554.1	556.8	554.5
165°	565.5	564.1	563.2	565.9	564.1
167.5°	573.2	571.4	571.4	574.1	571.4
170°	579.6	577.3	577.8	580.5	577.3
172.5°	584.2	582.3	582.3	585.5	582.3
175°	588.3	586.0	585.5	588.7	585.5
177.5°	590.1	587.8	587.8	591.0	587.4
180°	589.2	589.2	589.2	589.2	589.2

(END OF REPORT)