

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: P1034101

Luminaire Tested: S124RDIW-B350D770UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034101
REPORT IS A COMBINATION OF REPORTS P1000439 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D770UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

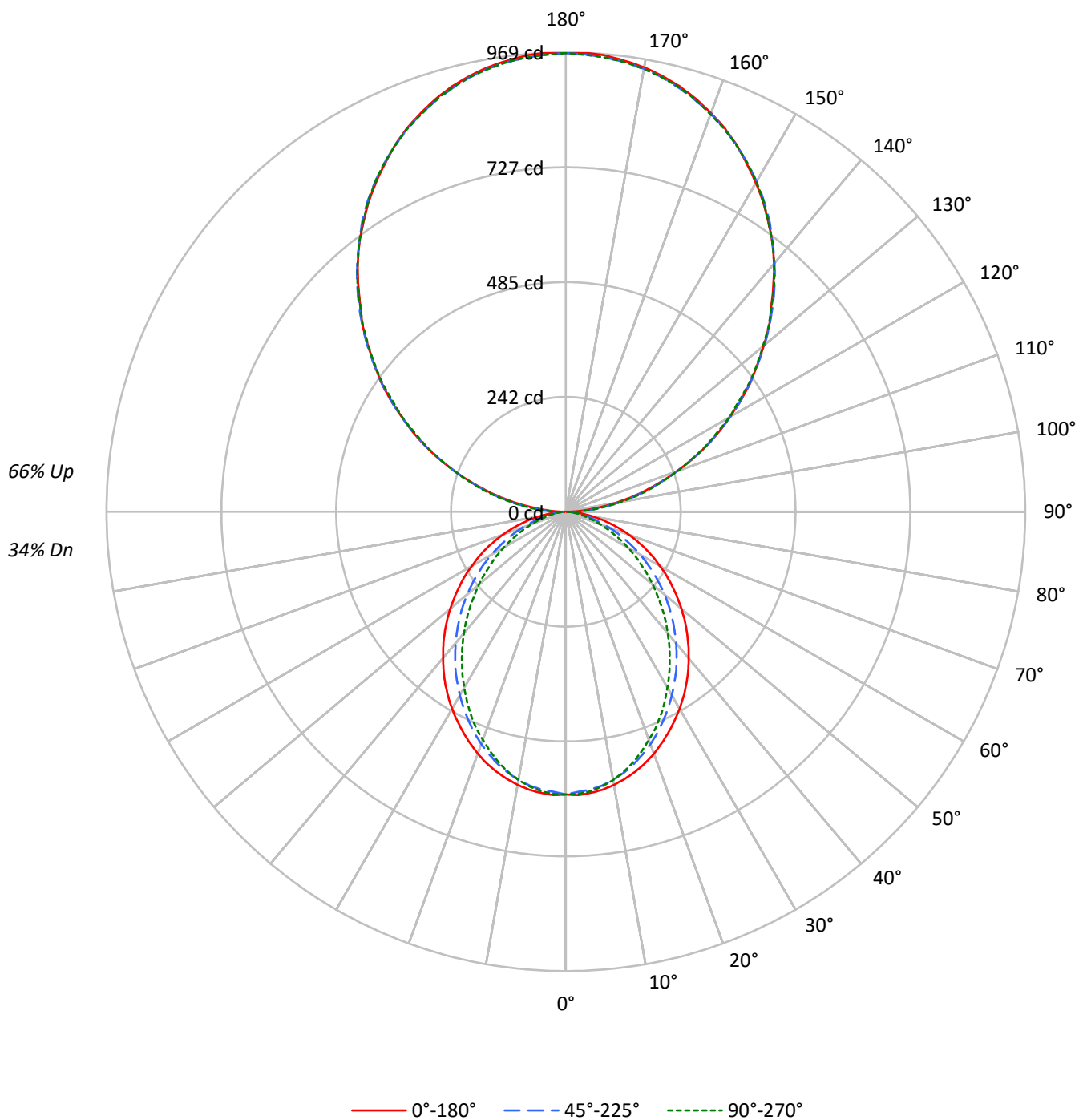
Lumens per Lamp: N/A
Luminaire Lumens: 4065.0 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	4863	4863	4863
5°	4864	4719	4719
10°	4823	4570	4516
15°	4757	4384	4275
20°	4670	4173	4001
25°	4561	3945	3733
30°	4454	3713	3432
35°	4338	3477	3139
40°	4200	3223	2837
45°	4069	2971	2538
50°	3921	2695	2234
55°	3761	2414	1921
60°	3583	2114	1612
65°	3412	1772	1313
70°	3168	1410	1004
75°	2856	1025	702
80°	2385	631	504
85°	1797	364	277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	1.4
10°-20°	156.4	3.8
20°-30°	225.7	5.6
30°-40°	255.9	6.3
40°-50°	247.0	6.1
50°-60°	205.4	5.1
60°-70°	141.8	3.5
70°-80°	71.6	1.8
80°-90°	20.3	0.5
90°-100°	63.1	1.6
100°-110°	188.9	4.6
110°-120°	321.0	7.9
120°-130°	423.3	10.4
130°-140°	475.4	11.7
140°-150°	467.3	11.5
150°-160°	393.0	9.7
160°-170°	261.5	6.4
170°-180°	91.6	2.3
0°-30°	438.2	10.8
0°-40°	694.0	17.1
0°-60°	1146.4	28.2
0°-90°	1380.1	34.0
90°-120°	572.9	14.1
90°-150°	1938.9	47.7
90°-180°	2685.0	66.1
0°-180°	4065.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	596	594	588	593	592	57
15°	567	563	552	551	548	160
25°	513	505	486	478	474	236
35°	443	429	406	390	382	277
45°	362	345	317	295	287	279
55°	274	256	226	202	194	245
65°	186	167	138	118	112	184
75°	99	82	61	50	48	105
85°	25	16	14	13	13	27
90°	2	10	16	21	22	5
95°	45	52	57	59	59	49
105°	174	175	178	180	183	185
115°	326	326	325	324	323	322
125°	475	475	474	473	472	424
135°	613	617	617	616	614	474
145°	745	748	748	748	745	466
155°	853	853	852	855	852	393
165°	929	926	925	930	926	262
175°	966	962	962	967	962	92
180°	968	968	968	968	968	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.4	596.4	596.4	596.4	596.4
2.5°	598.2	596.4	591.4	596.4	595.9
5°	595.5	593.6	588.2	592.7	591.8
7.5°	591.4	589.5	582.7	585.9	584.5
10°	585.0	582.7	574.5	576.3	574.5
12.5°	576.7	574.0	564.0	564.9	562.1
15°	567.2	563.0	551.6	550.7	547.5
17.5°	556.2	550.3	537.0	534.7	530.2
20°	543.0	537.0	521.5	517.8	511.9
22.5°	528.3	521.5	504.6	498.7	494.1
25°	512.8	504.6	485.9	478.1	473.5
27.5°	496.8	486.8	467.1	458.0	451.6
30°	479.9	468.5	447.1	435.6	428.3
32.5°	462.1	448.9	426.5	412.8	406.0
35°	443.4	428.8	406.0	390.4	382.2
37.5°	423.8	408.7	383.6	366.7	358.5
40°	402.8	387.7	361.7	342.5	334.3
42.5°	382.7	366.7	339.3	319.7	311.0
45°	361.7	344.8	317.4	295.0	286.8
47.5°	340.2	322.8	294.5	271.2	262.1
50°	318.3	300.5	271.2	248.4	239.7
52.5°	295.9	278.6	248.4	225.1	216.0
55°	274.0	255.7	226.0	202.3	193.6
57.5°	252.5	233.3	204.1	179.9	173.5
60°	229.2	211.0	181.7	158.0	150.7
62.5°	208.2	189.1	158.9	137.5	132.0
65°	186.3	166.7	137.5	117.8	112.3
67.5°	163.5	144.8	117.4	100.0	93.6
70°	142.0	122.8	96.8	81.7	77.2
72.5°	119.2	102.3	78.1	65.8	61.6
75°	99.1	82.2	60.7	50.2	47.5
77.5°	78.1	63.5	45.2	37.9	37.0
80°	58.0	44.8	31.1	29.7	29.2
82.5°	40.6	28.8	22.4	21.5	21.0
85°	24.7	15.5	14.2	13.2	13.2
87.5°	10.5	6.8	6.4	5.9	6.4
90°	2.2	10.5	16.5	21.0	22.5
92.5°	19.5	29.2	32.9	35.2	35.9
95°	44.9	51.6	56.9	59.1	59.1
97.5°	71.8	77.8	83.8	86.8	86.8
100°	104.8	107.8	114.5	116.0	116.0
102.5°	139.2	139.9	145.9	148.2	148.9
105°	174.4	175.1	178.1	180.4	182.6
107.5°	211.0	211.8	212.5	215.5	214.8
110°	248.5	250.0	249.2	247.7	250.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.4	287.4	285.9	285.9	285.9
115°	326.3	326.3	324.8	324.1	323.3
117.5°	363.0	363.0	362.2	360.0	357.7
120°	399.6	402.6	400.4	396.6	398.1
122.5°	437.8	438.6	437.8	435.6	431.8
125°	475.2	475.2	474.5	473.0	471.5
127.5°	508.9	511.2	509.7	508.2	507.4
130°	544.8	547.1	547.1	545.6	542.6
132.5°	581.5	583.0	582.2	580.8	580.0
135°	612.9	617.4	617.4	615.9	613.7
137.5°	648.1	650.4	651.8	649.6	650.4
140°	683.3	684.8	684.8	684.0	683.3
142.5°	715.5	717.0	716.2	716.2	716.2
145°	744.7	747.6	748.4	747.6	745.4
147.5°	774.6	778.3	777.6	776.8	776.1
150°	801.5	804.5	804.5	804.5	803.8
152.5°	827.0	828.5	829.2	831.5	829.2
155°	853.2	853.2	852.4	855.4	852.4
157.5°	875.6	874.1	874.1	876.4	874.1
160°	895.1	894.3	893.6	895.8	892.1
162.5°	913.0	910.8	910.0	914.5	910.8
165°	928.8	926.5	925.0	929.5	926.5
167.5°	941.5	938.5	938.5	943.0	938.5
170°	952.0	948.2	949.0	953.5	948.2
172.5°	959.4	956.4	956.4	961.7	956.4
175°	966.2	962.4	961.7	966.9	961.7
177.5°	969.2	965.4	965.4	970.7	964.7
180°	967.7	967.7	967.7	967.7	967.7

(END OF REPORT)