

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: P1034100

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034100
REPORT IS A COMBINATION OF REPORTS P1000438 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-F
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

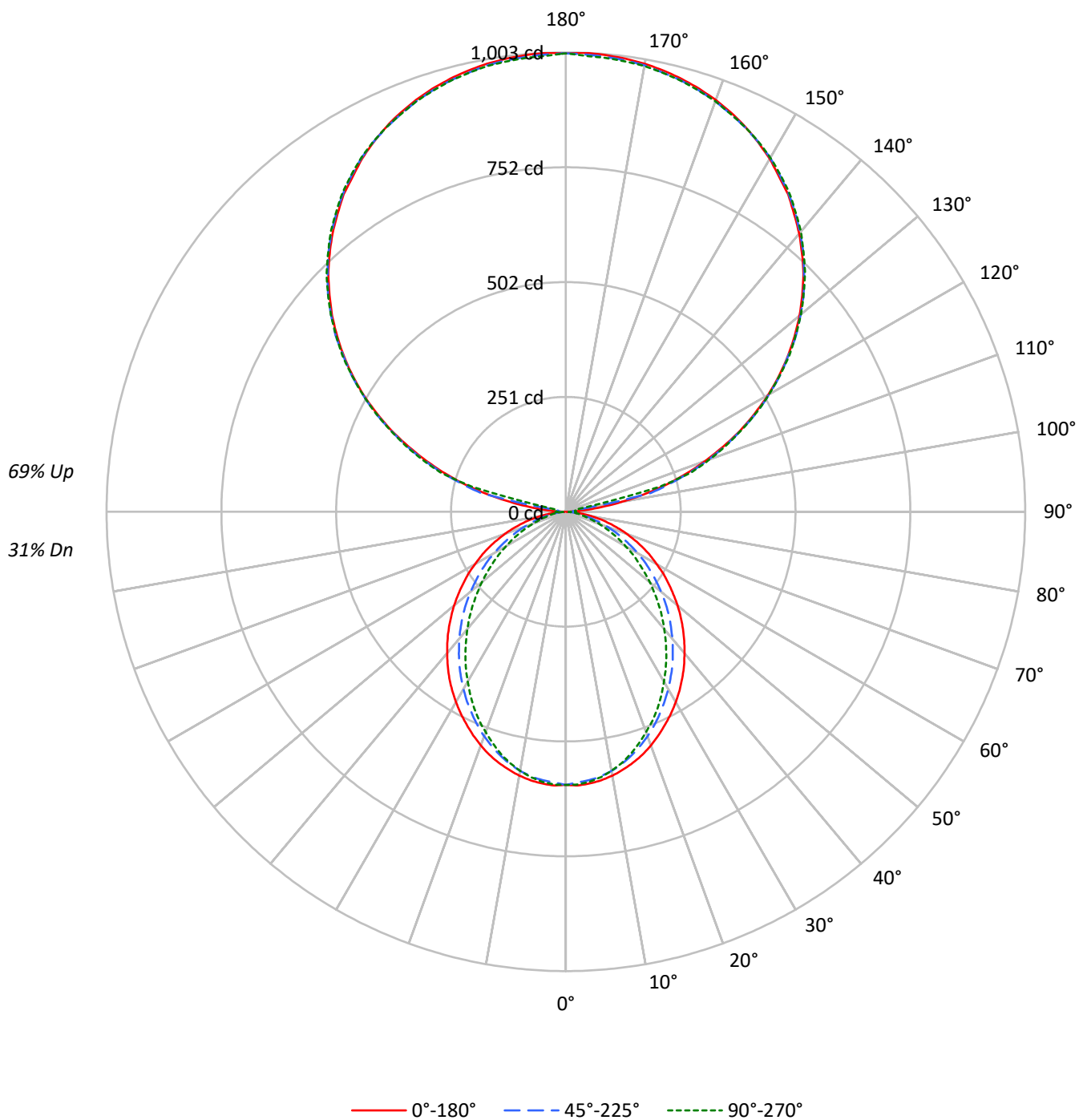
Lumens per Lamp: N/A
Luminaire Lumens: 4477.0 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	33	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°	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	1.3
10°-20°	156.4	3.5
20°-30°	225.7	5.0
30°-40°	255.9	5.7
40°-50°	247.0	5.5
50°-60°	205.4	4.6
60°-70°	141.8	3.2
70°-80°	71.6	1.6
80°-90°	20.3	0.5
90°-100°	33.2	0.7
100°-110°	218.8	4.9
110°-120°	417.8	9.3
120°-130°	530.4	11.8
130°-140°	567.4	12.7
140°-150°	530.5	11.9
150°-160°	427.8	9.6
160°-170°	275.9	6.2
170°-180°	95.1	2.1
0°-30°	438.2	9.8
0°-40°	694.0	15.5
0°-60°	1146.4	25.6
0°-90°	1380.1	30.8
90°-120°	669.8	15.0
90°-150°	2298.1	51.3
90°-180°	3097.0	69.2
0°-180°	4477.0	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	4
95°	41	16	16	21	22	51
105°	225	230	234	240	213	236
115°	421	423	422	424	424	414
125°	591	594	593	595	596	528
135°	734	733	736	737	739	565
145°	846	848	848	849	850	529
155°	928	928	926	929	927	428
165°	978	975	975	981	974	276
175°	1001	996	997	1004	995	95
180°	1001	1001	1001	1001	1001	

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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°	11.2	9.7	15.7	20.2	20.2
95°	41.2	15.7	16.5	21.0	21.7
97.5°	78.6	95.1	16.5	20.2	21.0
100°	122.8	136.2	32.9	20.2	21.0
102.5°	172.2	181.2	190.1	21.7	21.7
105°	225.3	229.8	233.6	240.3	213.3
107.5°	274.0	276.2	281.5	285.2	288.2
110°	323.4	325.6	330.1	331.6	333.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	371.3	375.8	377.3	376.5	379.5
115°	420.7	422.9	422.2	423.7	423.7
117.5°	464.9	467.9	470.1	469.4	469.4
120°	509.8	512.8	512.0	513.5	512.0
122.5°	551.7	553.2	554.7	555.4	553.9
125°	591.4	594.4	592.9	595.1	595.9
127.5°	629.5	630.3	634.0	633.3	632.5
130°	666.2	667.0	669.2	670.0	670.0
132.5°	699.9	701.4	704.4	705.2	704.4
135°	733.6	732.8	735.8	737.3	738.8
137.5°	763.5	763.5	767.3	768.8	768.0
140°	792.7	794.2	795.7	798.0	798.7
142.5°	818.9	821.9	822.7	824.2	824.2
145°	845.9	848.1	848.1	848.9	850.4
147.5°	866.8	871.3	870.6	871.3	872.1
150°	890.0	893.0	892.3	892.3	893.0
152.5°	909.5	911.8	910.3	911.8	911.0
155°	927.5	928.2	926.0	929.0	926.7
157.5°	943.2	943.2	940.2	943.9	940.2
160°	956.7	954.4	953.7	958.2	953.7
162.5°	968.6	965.7	964.9	969.4	964.2
165°	978.4	974.6	974.6	980.6	973.9
167.5°	986.6	982.9	982.1	988.9	981.4
170°	993.3	988.9	989.6	995.6	988.1
172.5°	997.8	993.3	994.1	1000.1	991.9
175°	1000.8	996.3	997.1	1003.8	994.8
177.5°	1003.1	997.8	999.3	1005.3	996.3
180°	1000.8	1000.8	1000.8	1000.8	1000.8

(END OF REPORT)