

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: P1034116

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034116
REPORT IS A COMBINATION OF REPORTS P1000476 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-F
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

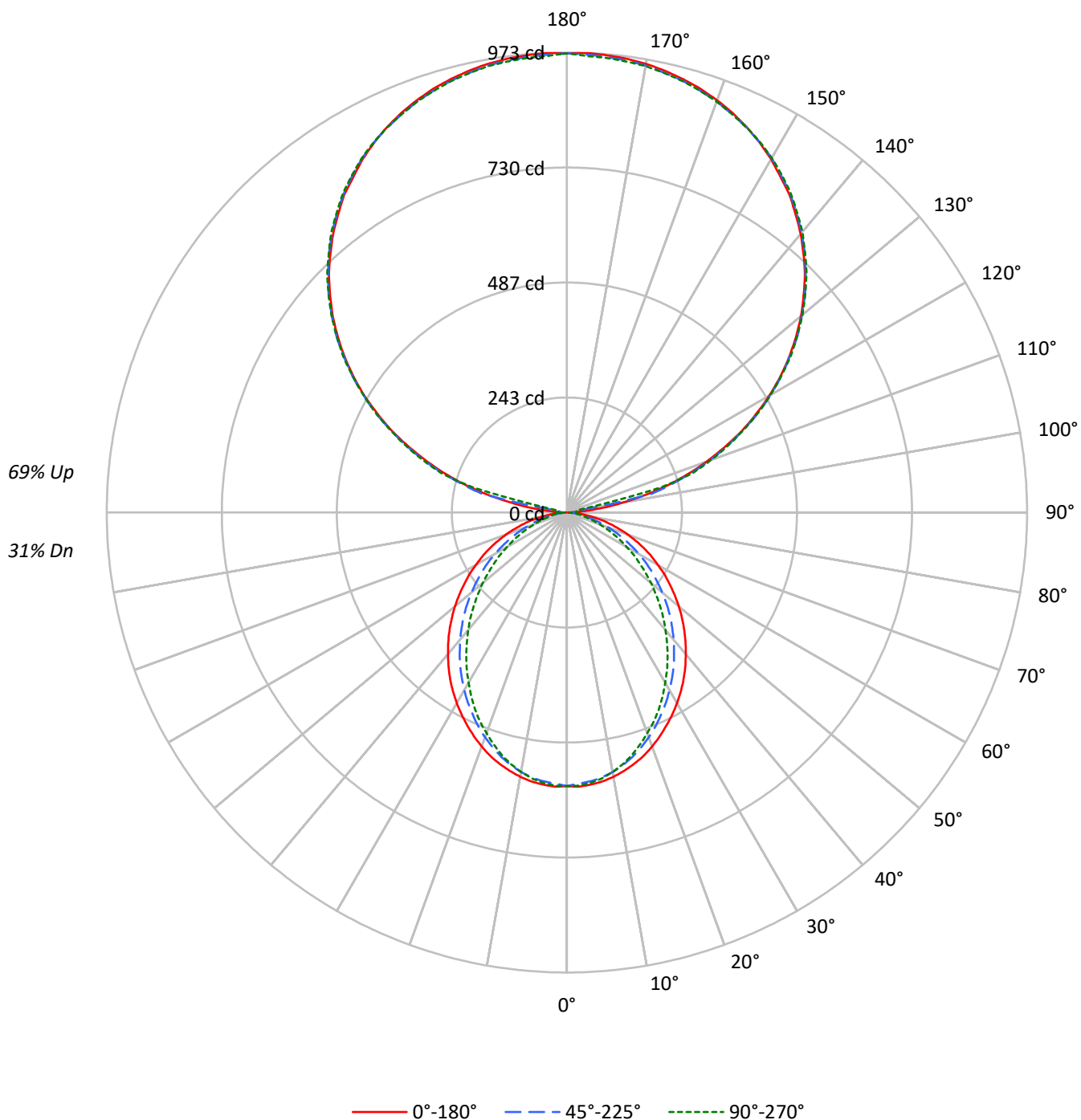
Lumens per Lamp: N/A
Luminaire Lumens: 4343.0 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	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	1.3
10°-20°	151.7	3.5
20°-30°	219.0	5.0
30°-40°	248.2	5.7
40°-50°	239.7	5.5
50°-60°	199.3	4.6
60°-70°	137.5	3.2
70°-80°	69.5	1.6
80°-90°	19.6	0.5
90°-100°	32.2	0.7
100°-110°	212.2	4.9
110°-120°	405.3	9.3
120°-130°	514.5	11.8
130°-140°	550.4	12.7
140°-150°	514.6	11.8
150°-160°	415.0	9.6
160°-170°	267.6	6.2
170°-180°	92.2	2.1
0°-30°	425.2	9.8
0°-40°	673.4	15.5
0°-60°	1112.3	25.6
0°-90°	1339.0	30.8
90°-120°	649.7	15.0
90°-150°	2229.1	51.3
90°-180°	3004.0	69.2
0°-180°	4343.0	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	3
95°	40	15	16	20	21	49
105°	219	223	226	233	207	229
115°	408	410	410	411	411	402
125°	574	576	575	577	578	512
135°	712	711	714	715	717	548
145°	820	823	823	823	825	513
155°	900	900	898	901	899	415
165°	949	945	945	951	945	268
175°	971	966	967	974	965	92
180°	971	971	971	971	971	

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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°	10.9	9.4	15.2	19.6	19.6
95°	39.9	15.2	16.0	20.3	21.1
97.5°	76.2	92.2	16.0	19.6	20.3
100°	119.1	132.2	31.9	19.6	20.3
102.5°	167.0	175.7	184.4	21.1	21.1
105°	218.6	222.9	226.5	233.1	206.9
107.5°	265.8	267.9	273.0	276.6	279.5
110°	313.7	315.9	320.2	321.7	323.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	360.1	364.5	366.0	365.2	368.1
115°	408.1	410.2	409.5	411.0	411.0
117.5°	450.9	453.8	456.0	455.3	455.3
120°	494.5	497.4	496.7	498.1	496.7
122.5°	535.1	536.6	538.0	538.8	537.3
125°	573.6	576.5	575.1	577.3	578.0
127.5°	610.7	611.4	615.0	614.3	613.6
130°	646.2	647.0	649.1	649.9	649.9
132.5°	678.9	680.4	683.3	684.0	683.3
135°	711.6	710.9	713.8	715.2	716.7
137.5°	740.6	740.6	744.3	745.7	745.0
140°	768.9	770.4	771.8	774.0	774.8
142.5°	794.4	797.3	798.0	799.4	799.4
145°	820.5	822.7	822.7	823.4	824.9
147.5°	840.8	845.2	844.5	845.2	845.9
150°	863.3	866.2	865.5	865.5	866.2
152.5°	882.2	884.4	882.9	884.4	883.7
155°	899.6	900.4	898.2	901.1	898.9
157.5°	914.9	914.9	912.0	915.6	912.0
160°	928.0	925.8	925.1	929.4	925.1
162.5°	939.6	936.7	935.9	940.3	935.2
165°	949.0	945.4	945.4	951.2	944.7
167.5°	957.0	953.4	952.6	959.2	951.9
170°	963.5	959.2	959.9	965.7	958.5
172.5°	967.9	963.5	964.3	970.1	962.1
175°	970.8	966.4	967.2	973.7	965.0
177.5°	973.0	967.9	969.3	975.2	966.4
180°	970.8	970.8	970.8	970.8	970.8

(END OF REPORT)