

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: P1034214

Luminaire Tested: S124RDIW-B575D770UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034214
REPORT IS A COMBINATION OF REPORTS P1000696 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B575D770UB50-4F0-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

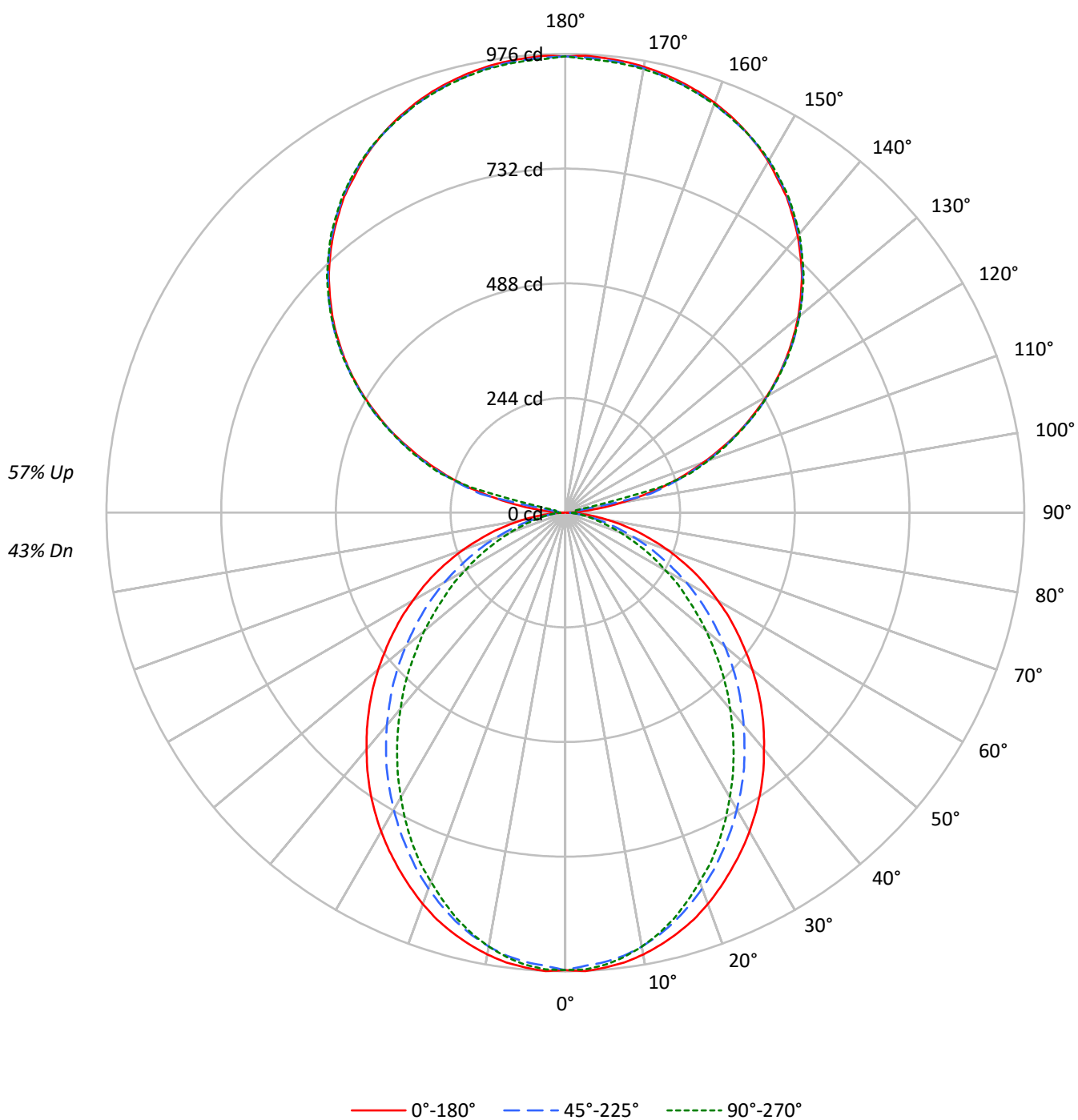
Lumens per Lamp: N/A
Luminaire Lumens: 5255.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	68	66	56	55	54	44	43	42
2	88	81	75	70	80	74	69	65	61	58	55	50	47	45	39	37	36
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	74	63	55	50	67	58	51	46	48	43	39	40	36	33	31	29	27
5	68	56	48	42	62	52	45	40	43	38	34	36	32	29	28	26	23
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21
7	58	46	38	32	53	42	35	30	35	30	26	29	25	22	23	21	18
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17
9	50	38	30	25	45	35	28	24	30	25	21	25	21	18	20	17	15
10	46	35	28	23	43	32	26	22	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7937	7937	7937
5°	7937	7701	7702
10°	7870	7459	7370
15°	7762	7156	6977
20°	7620	6811	6530
25°	7444	6439	6093
30°	7271	6059	5603
35°	7080	5674	5123
40°	6853	5260	4630
45°	6641	4849	4142
50°	6400	4400	3647
55°	6139	3940	3136
60°	5848	3451	2630
65°	5569	2890	2144
70°	5171	2301	1639
75°	4660	1674	1146
80°	3895	1028	824
85°	2925	592	453

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6641 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	1.7
10°-20°	255.2	4.9
20°-30°	368.4	7.0
30°-40°	417.6	7.9
40°-50°	403.2	7.7
50°-60°	335.2	6.4
60°-70°	231.3	4.4
70°-80°	116.9	2.2
80°-90°	31.7	0.6
90°-100°	32.2	0.6
100°-110°	212.2	4.0
110°-120°	405.3	7.7
120°-130°	514.5	9.8
130°-140°	550.4	10.5
140°-150°	514.6	9.8
150°-160°	415.0	7.9
160°-170°	267.6	5.1
170°-180°	92.2	1.8
0°-30°	715.2	13.6
0°-40°	1132.7	21.6
0°-60°	1871.1	35.6
0°-90°	2251.0	42.8
90°-120°	649.7	12.4
90°-150°	2229.1	42.4
90°-180°	3004.0	57.2
0°-180°	5255.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	972	969	960	967	966	92
15°	926	919	900	899	894	261
25°	837	824	793	780	773	386
35°	724	700	663	637	624	452
45°	590	563	518	482	468	455
55°	447	417	369	330	316	400
65°	304	272	224	192	183	300
75°	162	134	99	82	78	171
85°	40	25	23	22	22	44
90°	2	10	16	20	22	4
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°	973.3	973.3	973.3	973.3	973.3
2.5°	976.3	973.3	965.1	973.3	972.6
5°	971.8	968.9	959.9	967.4	965.9
7.5°	965.1	962.2	951.0	956.2	954.0
10°	954.7	951.0	937.6	940.5	937.6
12.5°	941.3	936.8	920.4	921.9	917.4
15°	925.6	918.9	900.3	898.8	893.6
17.5°	907.8	898.1	876.5	872.7	865.3
20°	886.1	876.5	851.1	845.1	835.5
22.5°	862.3	851.1	823.5	813.8	806.4
25°	837.0	823.5	793.0	780.3	772.9
27.5°	810.9	794.5	762.4	747.5	737.1
30°	783.3	764.7	729.6	711.0	699.1
32.5°	754.2	732.6	696.1	673.7	662.6
35°	723.7	699.8	662.6	637.2	623.8
37.5°	691.6	667.0	626.0	598.5	585.0
40°	657.3	632.7	590.3	559.0	545.5
42.5°	624.5	598.5	553.7	521.7	507.5
45°	590.3	562.7	518.0	481.5	468.0
47.5°	555.2	526.9	480.7	442.7	427.8
50°	519.5	490.4	442.7	405.4	391.3
52.5°	482.9	454.6	405.4	367.4	352.5
55°	447.2	417.4	368.9	330.2	316.0
57.5°	412.1	380.8	333.1	293.6	283.2
60°	374.1	344.3	296.6	257.9	245.9
62.5°	339.8	308.5	259.4	224.3	215.4
65°	304.1	272.0	224.3	192.3	183.3
67.5°	266.8	236.3	191.5	163.2	152.8
70°	231.8	200.5	158.0	133.4	126.0
72.5°	194.5	166.9	127.4	107.3	100.6
75°	161.7	134.2	99.1	82.0	77.5
77.5°	127.4	103.6	73.8	61.9	60.4
80°	94.7	73.0	50.7	48.4	47.7
82.5°	66.3	47.0	36.5	35.0	34.3
85°	40.2	25.3	23.1	21.6	21.6
87.5°	17.1	11.2	10.4	9.7	10.4
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)