

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: P1034210

Luminaire Tested: S124RDIW-B575D770UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034210
REPORT IS A COMBINATION OF REPORTS P1000690 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B575D770UB40-4F0-XX-W2A-F
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

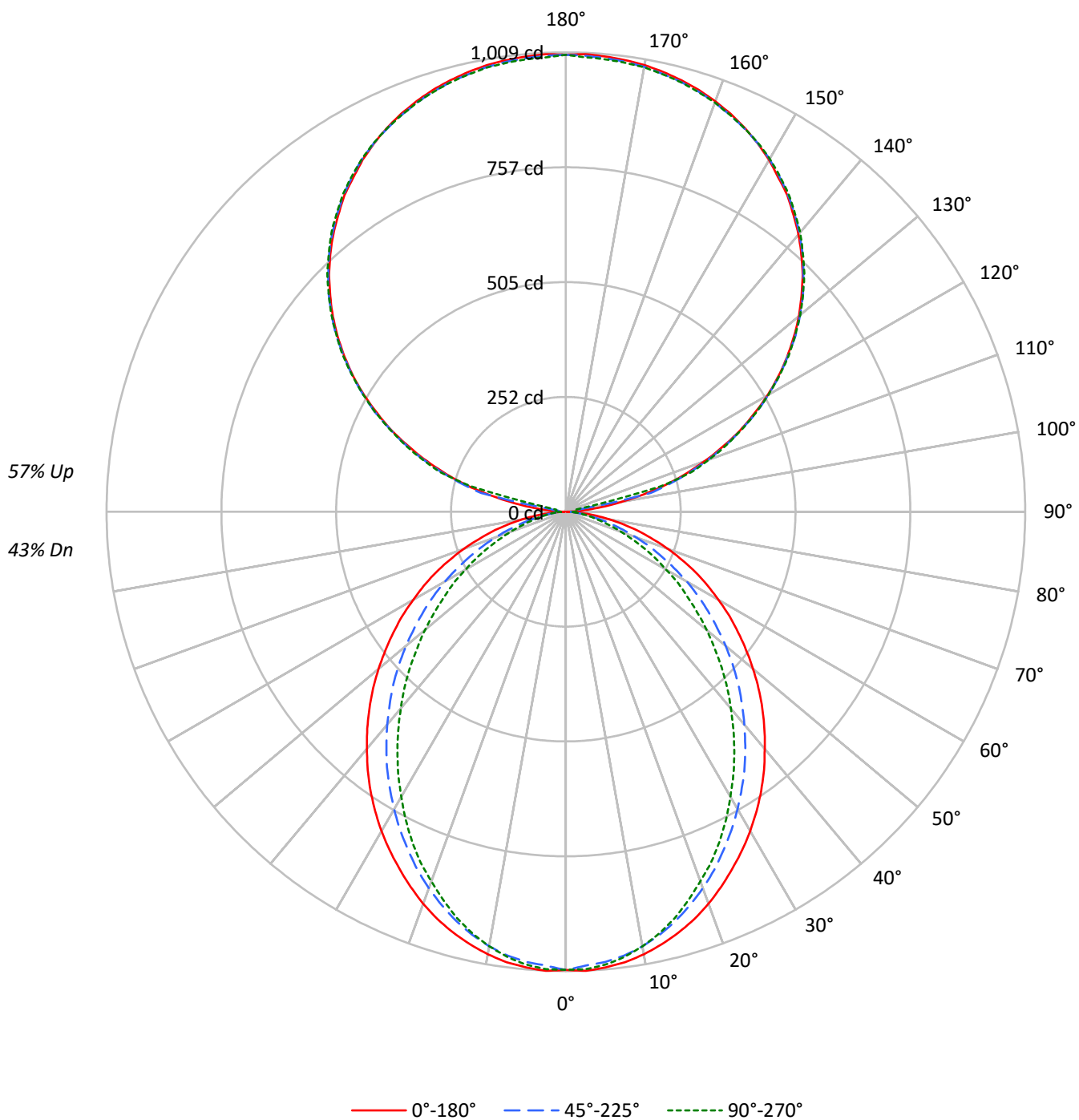
Lumens per Lamp: N/A
Luminaire Lumens: 5433.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	8205	8205	8205
5°	8206	7962	7962
10°	8137	7710	7618
15°	8025	7397	7213
20°	7878	7041	6750
25°	7695	6656	6299
30°	7517	6264	5792
35°	7319	5865	5296
40°	7086	5437	4787
45°	6865	5013	4283
50°	6615	4549	3770
55°	6346	4073	3242
60°	6046	3567	2720
65°	5758	2988	2216
70°	5345	2378	1694
75°	4818	1731	1184
80°	4022	1063	852
85°	3027	612	467

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6865 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.7
10°-20°	263.8	4.9
20°-30°	380.9	7.0
30°-40°	431.7	7.9
40°-50°	416.8	7.7
50°-60°	346.5	6.4
60°-70°	239.2	4.4
70°-80°	120.8	2.2
80°-90°	32.8	0.6
90°-100°	33.3	0.6
100°-110°	219.4	4.0
110°-120°	419.0	7.7
120°-130°	531.9	9.8
130°-140°	569.0	10.5
140°-150°	532.1	9.8
150°-160°	429.1	7.9
160°-170°	276.7	5.1
170°-180°	95.4	1.8
0°-30°	739.3	13.6
0°-40°	1171.0	21.6
0°-60°	1934.3	35.6
0°-90°	2327.1	42.8
90°-120°	671.8	12.4
90°-150°	2304.8	42.4
90°-180°	3106.0	57.2
0°-180°	5433.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1005	1002	992	1000	998	95
15°	957	950	931	929	924	270
25°	865	851	820	807	799	399
35°	748	724	685	659	645	468
45°	610	582	536	498	484	471
55°	462	432	381	341	327	414
65°	314	281	232	199	190	310
75°	167	139	102	85	80	176
85°	42	26	24	22	22	46
90°	2	10	16	21	22	5
95°	41	16	16	21	22	51
105°	226	230	234	241	214	237
115°	422	424	423	425	425	415
125°	593	596	595	597	598	530
135°	736	735	738	740	741	567
145°	848	851	851	851	853	530
155°	930	931	929	932	929	429
165°	981	978	978	984	977	277
175°	1004	999	1000	1007	998	96
180°	1004	1004	1004	1004	1004	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1006.2	1006.2	1006.2	1006.2	1006.2
2.5°	1009.3	1006.2	997.8	1006.2	1005.5
5°	1004.7	1001.6	992.4	1000.1	998.5
7.5°	997.8	994.7	983.1	988.5	986.2
10°	987.0	983.1	969.2	972.3	969.2
12.5°	973.1	968.5	951.5	953.1	948.4
15°	956.9	950.0	930.7	929.2	923.8
17.5°	938.4	928.4	906.1	902.2	894.5
20°	916.1	906.1	879.9	873.7	863.7
22.5°	891.4	879.9	851.4	841.3	833.6
25°	865.2	851.4	819.8	806.7	799.0
27.5°	838.3	821.3	788.2	772.8	762.0
30°	809.8	790.5	754.3	735.0	722.7
32.5°	779.7	757.4	719.6	696.5	684.9
35°	748.1	723.5	684.9	658.7	644.9
37.5°	715.0	689.6	647.2	618.7	604.8
40°	679.6	654.1	610.2	577.8	564.0
42.5°	645.7	618.7	572.5	539.3	524.7
45°	610.2	581.7	535.5	497.7	483.9
47.5°	574.0	544.7	497.0	457.7	442.2
50°	537.0	507.0	457.7	419.1	404.5
52.5°	499.3	470.0	419.1	379.8	364.4
55°	462.3	431.5	381.4	341.3	326.7
57.5°	426.1	393.7	344.4	303.6	292.8
60°	386.8	356.0	306.6	266.6	254.3
62.5°	351.3	319.0	268.1	231.9	222.7
65°	314.4	281.2	231.9	198.8	189.5
67.5°	275.8	244.2	198.0	168.7	157.9
70°	239.6	207.3	163.3	137.9	130.2
72.5°	201.1	172.6	131.7	110.9	104.0
75°	167.2	138.7	102.5	84.8	80.1
77.5°	131.7	107.1	76.3	63.9	62.4
80°	97.8	75.5	52.4	50.1	49.3
82.5°	68.6	48.5	37.8	36.2	35.4
85°	41.6	26.2	23.9	22.3	22.3
87.5°	17.7	11.6	10.8	10.0	10.8
90°	2.3	10.5	16.5	21.0	22.5
92.5°	11.3	9.8	15.8	20.3	20.3
95°	41.3	15.8	16.5	21.0	21.8
97.5°	78.8	95.3	16.5	20.3	21.0
100°	123.1	136.6	33.0	20.3	21.0
102.5°	172.7	181.7	190.7	21.8	21.8
105°	226.0	230.5	234.2	241.0	214.0
107.5°	274.8	277.0	282.3	286.0	289.0
110°	324.3	326.6	331.1	332.6	334.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	372.4	376.9	378.4	377.6	380.6
115°	421.9	424.2	423.4	424.9	424.9
117.5°	466.2	469.2	471.5	470.7	470.7
120°	511.3	514.3	513.5	515.0	513.5
122.5°	553.3	554.8	556.3	557.0	555.5
125°	593.1	596.1	594.6	596.8	597.6
127.5°	631.4	632.1	635.9	635.1	634.4
130°	668.2	668.9	671.2	671.9	671.9
132.5°	701.9	703.4	706.4	707.2	706.4
135°	735.7	735.0	738.0	739.5	741.0
137.5°	765.8	765.8	769.5	771.0	770.3
140°	795.0	796.5	798.0	800.3	801.0
142.5°	821.3	824.3	825.1	826.6	826.6
145°	848.3	850.6	850.6	851.3	852.8
147.5°	869.4	873.9	873.1	873.9	874.6
150°	892.6	895.6	894.9	894.9	895.6
152.5°	912.2	914.4	912.9	914.4	913.7
155°	930.2	930.9	928.7	931.7	929.4
157.5°	945.9	945.9	942.9	946.7	942.9
160°	959.4	957.2	956.4	960.9	956.4
162.5°	971.5	968.5	967.7	972.2	967.0
165°	981.2	977.5	977.5	983.5	976.7
167.5°	989.5	985.7	985.0	991.7	984.2
170°	996.2	991.7	992.5	998.5	991.0
172.5°	1000.7	996.2	997.0	1003.0	994.7
175°	1003.7	999.2	1000.0	1006.7	997.7
177.5°	1006.0	1000.7	1002.2	1008.2	999.2
180°	1003.7	1003.7	1003.7	1003.7	1003.7

(END OF REPORT)