

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: P1033669

Luminaire Tested: S124DIW-B575D770UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033669
REPORT IS A COMBINATION OF REPORTS P997927 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

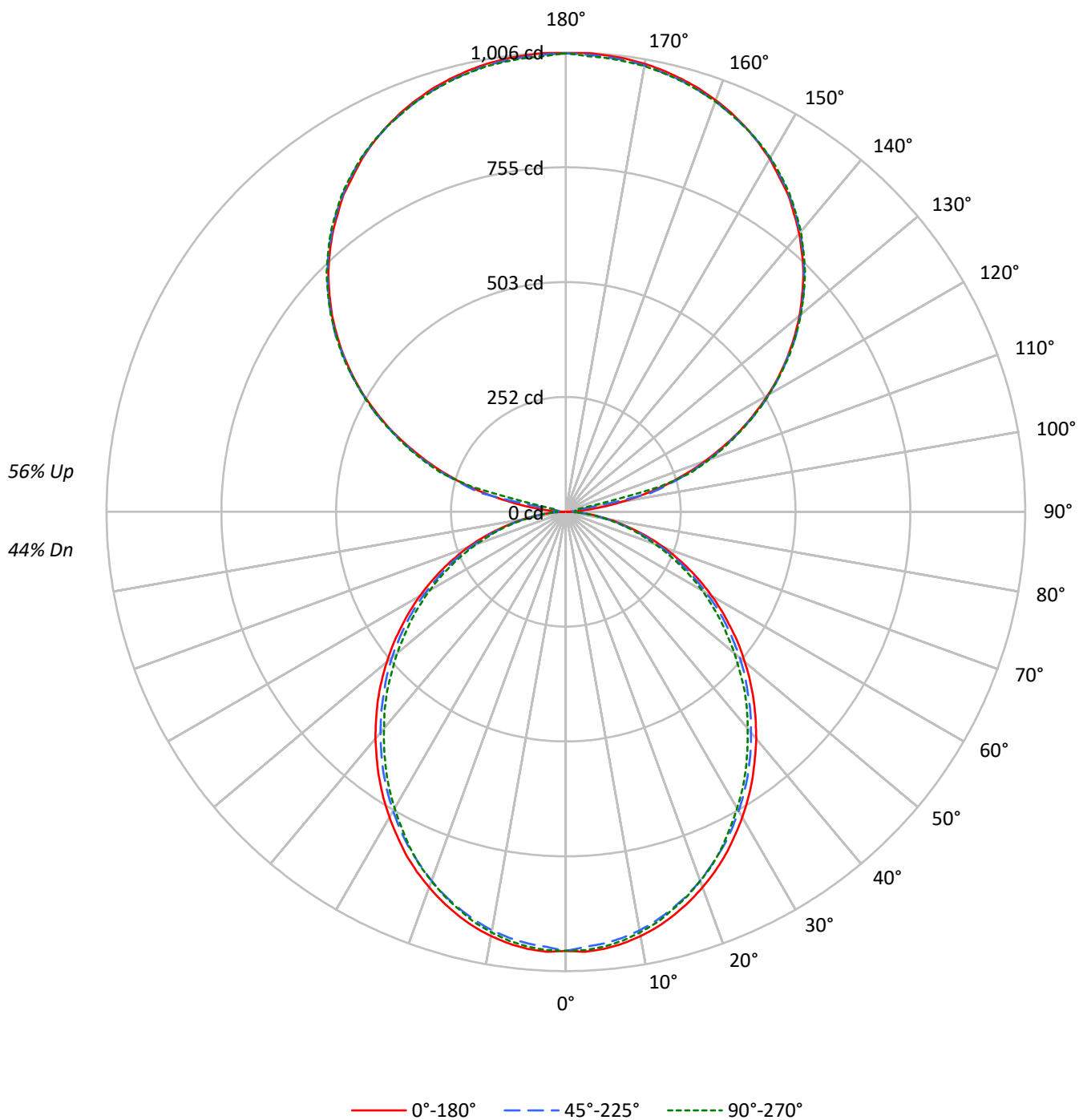
Lumens per Lamp: N/A
Luminaire Lumens: 5576.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	40	38	36
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	73	63	55	49	67	58	51	45	48	43	39	39	36	33	31	29	26
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	26	23	20
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	21	18	16
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7841	7841	7841
5°	7848	7615	7625
10°	7781	7404	7353
15°	7669	7153	7045
20°	7527	6880	6726
25°	7367	6594	6384
30°	7173	6283	6008
35°	6973	5965	5644
40°	6763	5623	5258
45°	6545	5280	4896
50°	6302	4947	4495
55°	6038	4558	4098
60°	5770	4133	3683
65°	5461	3693	3217
70°	5104	3164	2717
75°	4573	2550	2176
80°	3899	1844	1530
85°	3027	1028	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.6
10°-20°	255.3	4.6
20°-30°	375.8	6.7
30°-40°	436.8	7.8
40°-50°	436.8	7.8
50°-60°	382.0	6.9
60°-70°	283.6	5.1
70°-80°	160.9	2.9
80°-90°	48.2	0.9
90°-100°	33.3	0.6
100°-110°	219.4	3.9
110°-120°	419.0	7.5
120°-130°	531.9	9.5
130°-140°	569.0	10.2
140°-150°	532.1	9.5
150°-160°	429.1	7.7
160°-170°	276.7	5.0
170°-180°	95.4	1.7
0°-30°	721.7	12.9
0°-40°	1158.6	20.8
0°-60°	1977.4	35.5
0°-90°	2470.1	44.3
90°-120°	671.8	12.0
90°-150°	2304.8	41.3
90°-180°	3106.0	55.7
0°-180°	5576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	958	949	958	956	91
15°	914	912	900	904	902	258
25°	828	823	812	813	810	381
35°	713	707	696	691	687	446
45°	582	576	564	556	553	448
55°	440	438	427	418	413	394
65°	298	294	287	279	275	295
75°	159	155	151	148	147	168
85°	42	42	40	40	39	45
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°	961.5	961.5	961.5	961.5	961.5
2.5°	964.6	962.3	953.8	961.5	960.8
5°	960.8	957.7	949.2	957.7	956.2
7.5°	953.8	950.8	941.5	948.4	947.7
10°	943.8	940.7	930.7	936.9	935.4
12.5°	930.7	927.6	916.9	923.8	921.5
15°	914.5	911.5	899.9	904.5	902.2
17.5°	896.1	892.2	881.4	884.5	883.0
20°	875.3	871.4	859.8	862.2	860.6
22.5°	852.9	847.5	836.0	840.6	837.5
25°	828.3	822.9	812.1	812.8	809.8
27.5°	800.5	795.1	785.1	783.6	779.7
30°	772.8	766.6	756.6	753.5	749.7
32.5°	743.5	738.1	727.3	723.5	719.6
35°	712.7	707.3	696.5	691.1	687.3
37.5°	680.3	675.7	664.1	658.8	653.4
40°	648.7	642.6	631.0	623.3	619.5
42.5°	614.8	611.8	598.7	589.4	587.1
45°	581.7	576.3	564.0	555.5	553.2
47.5°	547.0	543.2	531.6	522.4	516.2
50°	511.6	508.5	497.7	486.9	482.3
52.5°	476.9	473.1	461.5	452.3	446.1
55°	439.9	437.6	426.8	417.6	413.0
57.5°	405.3	403.0	392.2	382.9	378.3
60°	369.1	365.2	355.2	348.3	344.4
62.5°	333.6	330.5	319.7	313.6	309.7
65°	298.2	294.3	286.6	278.9	275.1
67.5°	262.0	258.9	251.2	243.5	242.7
70°	228.8	223.4	217.3	211.1	208.8
72.5°	193.4	188.0	183.4	178.7	176.4
75°	158.7	154.9	151.0	147.9	147.2
77.5°	124.8	123.3	119.4	118.7	116.3
80°	94.8	92.5	90.9	89.4	88.6
82.5°	65.5	64.7	64.7	63.9	63.2
85°	41.6	41.6	40.1	40.1	39.3
87.5°	20.0	19.3	18.5	18.5	18.5
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)