

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: P1032347

Luminaire Tested: S123RDIW-B560D460UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032347
REPORT IS A COMBINATION OF REPORTS P994553 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D460UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

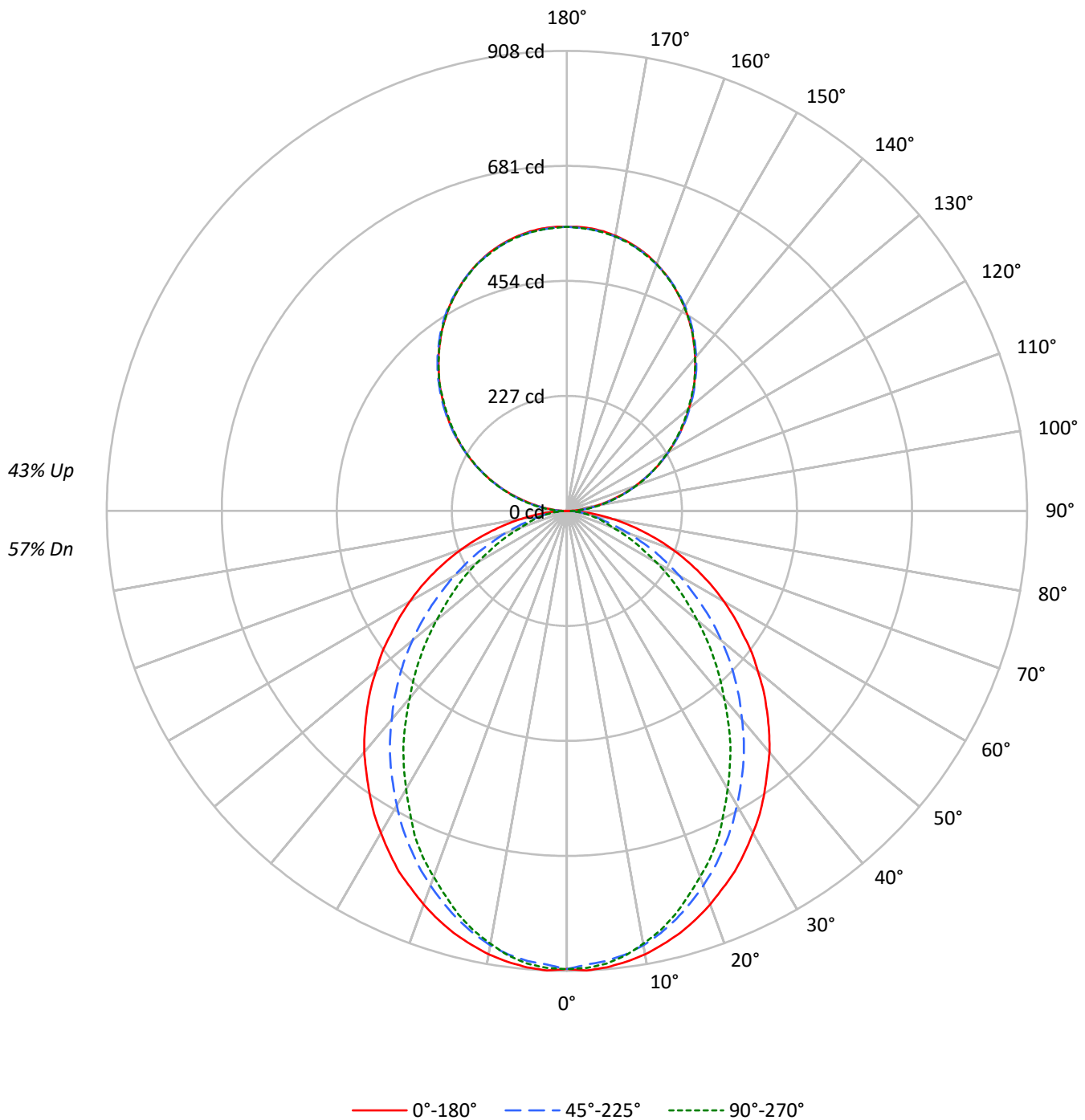
Lumens per Lamp: N/A
Luminaire Lumens: 3598.0 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	75	72	66	64	63	56	55	53
2	91	84	78	73	85	78	73	69	68	64	61	58	55	53	50	47	46
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	62	55	49	54	48	44	46	42	39	40	37	34
5	70	59	51	45	65	55	48	43	48	43	38	42	37	34	36	33	30
6	65	53	45	39	60	50	42	37	44	38	34	38	33	30	33	29	26
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	26	24
8	56	44	36	31	52	41	34	29	36	31	27	32	27	24	28	24	21
9	52	40	32	27	49	38	31	26	33	28	24	29	25	22	26	22	19
10	49	37	29	25	45	35	28	24	31	25	22	27	23	20	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9734	9734	9734
5°	9750	9389	9364
10°	9673	9037	8858
15°	9547	8600	8305
20°	9383	8126	7685
25°	9213	7632	7099
30°	8996	7108	6406
35°	8771	6593	5774
40°	8559	6033	5077
45°	8288	5486	4450
50°	7991	4901	3801
55°	7681	4275	3206
60°	7385	3634	2602
65°	7003	2977	2032
70°	6523	2250	1451
75°	5831	1523	1149
80°	4978	1059	806
85°	3737	571	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	2.4
10°-20°	236.5	6.6
20°-30°	340.5	9.5
30°-40°	383.4	10.7
40°-50°	366.8	10.2
50°-60°	300.2	8.3
60°-70°	202.4	5.6
70°-80°	101.5	2.8
80°-90°	27.7	0.8
90°-100°	36.1	1.0
100°-110°	109.3	3.0
110°-120°	186.0	5.2
120°-130°	244.7	6.8
130°-140°	275.0	7.6
140°-150°	270.4	7.5
150°-160°	227.7	6.3
160°-170°	151.6	4.2
170°-180°	53.1	1.5
0°-30°	662.0	18.4
0°-40°	1045.4	29.1
0°-60°	1712.5	47.6
0°-90°	2044.2	56.8
90°-120°	331.4	9.2
90°-150°	1121.5	31.2
90°-180°	1554.0	43.2
0°-180°	3598.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	901	892	898	897	86
15°	862	854	834	830	825	243
25°	785	766	733	717	709	361
35°	679	653	607	576	562	425
45°	558	525	469	427	409	431
55°	424	388	326	283	268	380
65°	290	249	192	156	148	287
75°	153	118	78	70	69	163
85°	39	23	20	19	19	43
90°	0	5	11	12	13	4
95°	26	29	33	34	34	29
105°	99	100	104	104	105	106
115°	187	188	188	188	188	185
125°	274	275	274	273	271	244
135°	356	358	358	356	355	274
145°	431	432	434	433	431	269
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	904.3	904.3	904.3	904.3	904.3
2.5°	908.0	905.0	896.2	904.3	902.8
5°	904.3	900.6	891.8	898.4	897.0
7.5°	897.7	894.0	883.0	887.4	885.2
10°	888.9	883.8	870.6	871.3	867.6
12.5°	876.4	870.6	853.7	853.0	848.6
15°	862.5	854.4	833.9	830.2	825.1
17.5°	845.6	836.8	811.2	803.8	796.5
20°	826.6	814.8	787.0	777.4	768.6
22.5°	805.3	791.4	761.3	748.8	740.8
25°	784.8	766.4	732.7	717.3	709.2
27.5°	759.8	740.0	703.4	682.8	670.3
30°	734.2	712.2	671.1	646.1	634.4
32.5°	708.5	682.8	638.8	610.9	598.5
35°	679.2	652.7	607.3	575.7	562.5
37.5°	649.8	621.2	573.5	538.3	522.2
40°	621.9	589.7	537.6	499.5	482.6
42.5°	590.4	558.1	503.9	461.3	446.7
45°	558.1	525.1	468.7	426.9	409.3
47.5°	526.6	489.9	434.2	388.7	373.3
50°	491.4	456.9	397.5	352.0	335.2
52.5°	459.9	421.7	363.0	315.4	300.7
55°	423.9	388.0	325.6	283.1	268.4
57.5°	391.6	352.8	289.7	249.4	236.9
60°	357.9	317.6	256.7	217.1	204.6
62.5°	324.2	283.8	223.0	186.3	173.1
65°	289.7	249.4	192.2	156.2	148.2
67.5°	255.2	214.2	158.4	131.3	122.5
70°	221.5	181.9	130.5	104.9	96.8
72.5°	187.8	148.9	103.4	83.6	81.4
75°	153.3	118.1	77.7	70.4	68.9
77.5°	121.7	89.5	60.9	56.5	55.0
80°	91.7	61.6	46.2	44.0	42.5
82.5°	63.1	38.1	33.0	30.8	30.8
85°	38.9	22.7	20.5	19.1	19.1
87.5°	17.6	9.5	9.5	8.8	8.1
90°	0.4	4.8	10.6	12.3	13.2
92.5°	13.2	15.9	18.5	19.8	18.9
95°	26.0	29.1	32.6	34.4	34.4
97.5°	42.7	44.9	47.6	49.8	49.3
100°	59.9	62.6	64.8	66.1	67.0
102.5°	79.7	81.1	84.1	85.5	85.0
105°	99.1	100.0	104.0	104.0	104.8
107.5°	122.0	122.5	124.2	125.5	125.1
110°	143.2	144.0	144.9	146.7	145.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.2	165.6	165.6	167.8	167.8
115°	187.2	188.5	187.7	188.1	187.7
117.5°	209.7	210.1	209.2	209.2	207.9
120°	230.4	233.0	230.8	230.4	229.5
122.5°	252.0	253.7	252.9	251.5	250.2
125°	274.0	275.3	274.4	272.7	270.9
127.5°	294.3	296.9	296.0	293.4	291.6
130°	314.5	318.1	316.7	315.0	311.9
132.5°	334.8	338.3	337.4	335.2	333.0
135°	355.5	358.1	357.7	355.9	355.1
137.5°	374.4	376.6	378.0	375.8	374.4
140°	394.3	396.5	396.9	396.5	393.4
142.5°	412.3	414.5	415.4	415.0	412.8
145°	431.3	432.1	433.5	433.0	431.3
147.5°	447.6	449.3	450.6	450.6	448.0
150°	464.7	465.6	466.5	466.5	463.9
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)