

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: P1031807

Luminaire Tested: S123DIW-B560D460UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031807
REPORT IS A COMBINATION OF REPORTS P991768 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D460UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

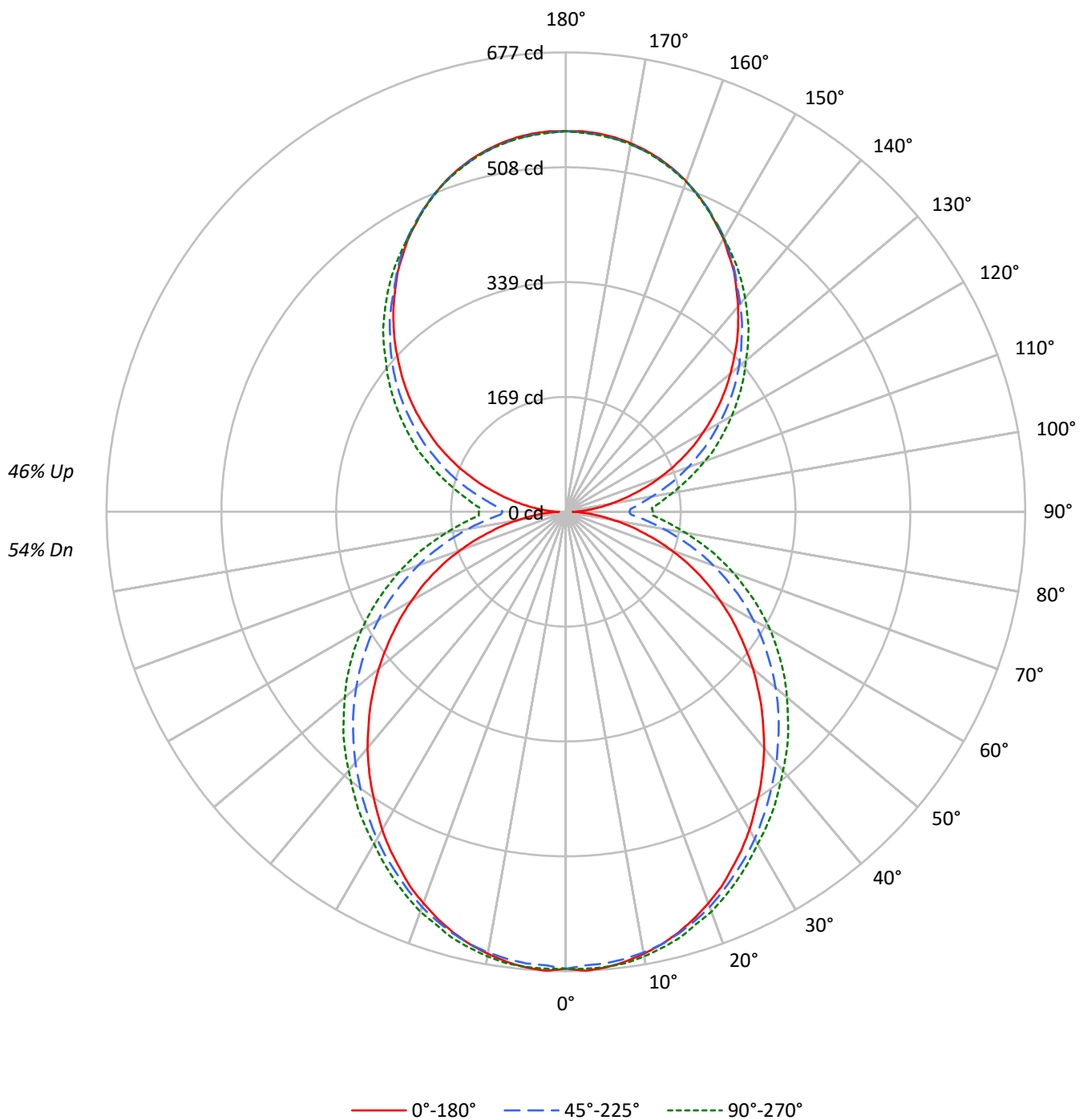
Lumens per Lamp: N/A
Luminaire Lumens: 3818.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	98	93	88	84	90	86	82	79	73	71	68	62	60	58	51	50	48
2	88	80	74	68	82	75	69	64	64	59	55	54	50	48	45	42	40
3	80	70	62	56	74	65	58	53	56	51	46	47	43	40	39	36	34
4	73	62	54	47	68	58	50	44	49	44	39	42	37	34	35	31	29
5	67	55	47	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	44	36	30	53	42	34	29	36	30	26	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	23	30	24	20	26	21	18	22	18	15
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7248	7248	7248
5°	7268	7035	7030
10°	7200	6845	6793
15°	7104	6634	6541
20°	6969	6400	6270
25°	6803	6136	5991
30°	6632	5896	5710
35°	6442	5646	5482
40°	6259	5416	5239
45°	6056	5195	5041
50°	5856	4974	4824
55°	5635	4748	4626
60°	5419	4518	4422
65°	5195	4272	4183
70°	4859	3996	3937
75°	4435	3681	3684
80°	3941	3363	3395
85°	3448	3105	3187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6056 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.7
10°-20°	182.1	4.8
20°-30°	272.3	7.1
30°-40°	325.1	8.5
40°-50°	340.2	8.9
50°-60°	319.2	8.4
60°-70°	266.6	7.0
70°-80°	190.7	5.0
80°-90°	114.6	3.0
90°-100°	107.4	2.8
100°-110°	161.7	4.2
110°-120°	221.0	5.8
120°-130°	264.7	6.9
130°-140°	284.0	7.4
140°-150°	272.3	7.1
150°-160°	227.7	6.0
160°-170°	151.6	4.0
170°-180°	53.1	1.4
0°-30°	518.3	13.6
0°-40°	843.4	22.1
0°-60°	1502.8	39.4
0°-90°	2074.7	54.3
90°-120°	490.0	12.8
90°-150°	1311.0	34.3
90°-180°	1743.0	45.7
0°-180°	3818.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	673	668	674	673	64
15°	642	644	643	651	650	181
25°	580	587	589	598	598	267
35°	499	510	520	531	534	312
45°	408	425	444	458	464	314
55°	311	335	362	381	387	278
65°	215	244	276	298	305	212
75°	117	151	188	212	221	125
85°	36	73	112	136	144	37
90°	10	50	94	120	128	9
95°	34	66	105	130	137	35
105°	105	124	159	180	187	112
115°	191	201	227	245	250	189
125°	276	278	298	312	315	247
135°	357	359	366	378	381	275
145°	432	432	434	439	440	270
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°	673.4	673.4	673.4	673.4	673.4
2.5°	677.0	674.8	669.0	674.8	674.1
5°	674.1	672.6	668.2	674.1	673.4
7.5°	669.0	669.0	664.6	671.9	671.2
10°	661.6	663.1	659.4	666.8	665.3
12.5°	652.8	655.0	652.8	659.4	658.0
15°	641.8	644.0	643.3	650.6	649.9
17.5°	628.6	633.0	632.3	638.9	637.4
20°	613.9	618.3	619.8	626.4	627.1
22.5°	598.5	602.9	605.1	613.9	613.2
25°	579.5	586.8	589.0	598.5	598.5
27.5°	561.1	569.2	573.6	581.7	582.4
30°	541.3	550.9	556.7	565.5	565.5
32.5°	519.3	530.3	538.4	547.9	550.1
35°	498.8	510.5	520.1	531.1	534.0
37.5°	476.8	490.0	501.0	513.5	515.7
40°	454.8	468.0	482.6	495.1	498.0
42.5°	430.6	447.4	462.8	476.8	481.2
45°	407.8	425.4	443.8	457.7	463.6
47.5°	383.6	403.4	424.0	439.4	443.8
50°	360.1	380.7	403.4	420.3	425.4
52.5°	335.2	357.2	382.9	400.5	407.1
55°	311.0	335.2	361.6	381.4	387.3
57.5°	287.5	312.5	341.1	360.9	367.5
60°	262.6	289.0	319.1	339.6	347.7
62.5°	239.1	266.3	298.5	319.1	326.4
65°	214.9	243.5	275.8	297.8	305.1
67.5°	190.7	220.8	253.1	277.3	283.1
70°	165.0	196.6	231.8	255.3	262.6
72.5°	141.6	173.1	209.8	234.0	241.3
75°	116.6	151.1	187.8	212.0	220.8
77.5°	95.4	129.8	166.5	192.2	198.8
80°	72.6	108.6	146.7	171.6	179.0
82.5°	52.8	89.5	128.4	153.3	160.6
85°	35.9	72.6	111.5	136.4	143.8
87.5°	22.0	58.7	96.1	121.0	128.4
90°	9.9	50.3	93.5	120.1	128.4
92.5°	22.0	56.2	95.5	121.0	126.7
95°	34.1	65.8	105.2	129.8	137.1
97.5°	50.0	78.6	115.8	140.0	146.9
100°	66.5	92.7	128.6	151.2	159.4
102.5°	85.6	107.5	143.5	165.5	172.3
105°	105.0	123.5	159.0	179.6	187.0
107.5°	127.1	143.0	174.8	195.9	202.1
110°	147.6	161.6	191.8	212.7	217.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.6	180.3	208.1	228.7	235.3
115°	190.9	201.0	226.6	244.6	250.0
117.5°	213.4	219.6	243.7	261.3	265.8
120°	233.3	239.6	261.6	278.1	282.3
122.5°	254.9	258.1	280.0	294.8	298.6
125°	276.2	277.5	297.9	311.6	314.9
127.5°	296.5	298.4	315.8	327.9	331.2
130°	316.7	319.6	332.8	345.1	346.4
132.5°	336.3	339.8	349.9	360.9	363.8
135°	357.0	358.8	366.5	377.9	380.8
137.5°	375.9	377.3	383.9	393.4	395.7
140°	395.0	397.2	399.8	410.4	411.0
142.5°	413.0	414.5	415.4	424.5	426.0
145°	432.0	432.1	433.5	438.9	440.1
147.5°	447.6	449.3	450.6	452.8	453.1
150°	464.7	465.6	466.5	466.5	465.4
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)