

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: P1031809

Luminaire Tested: S123DIW-B560D460UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031809
REPORT IS A COMBINATION OF REPORTS P991771 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

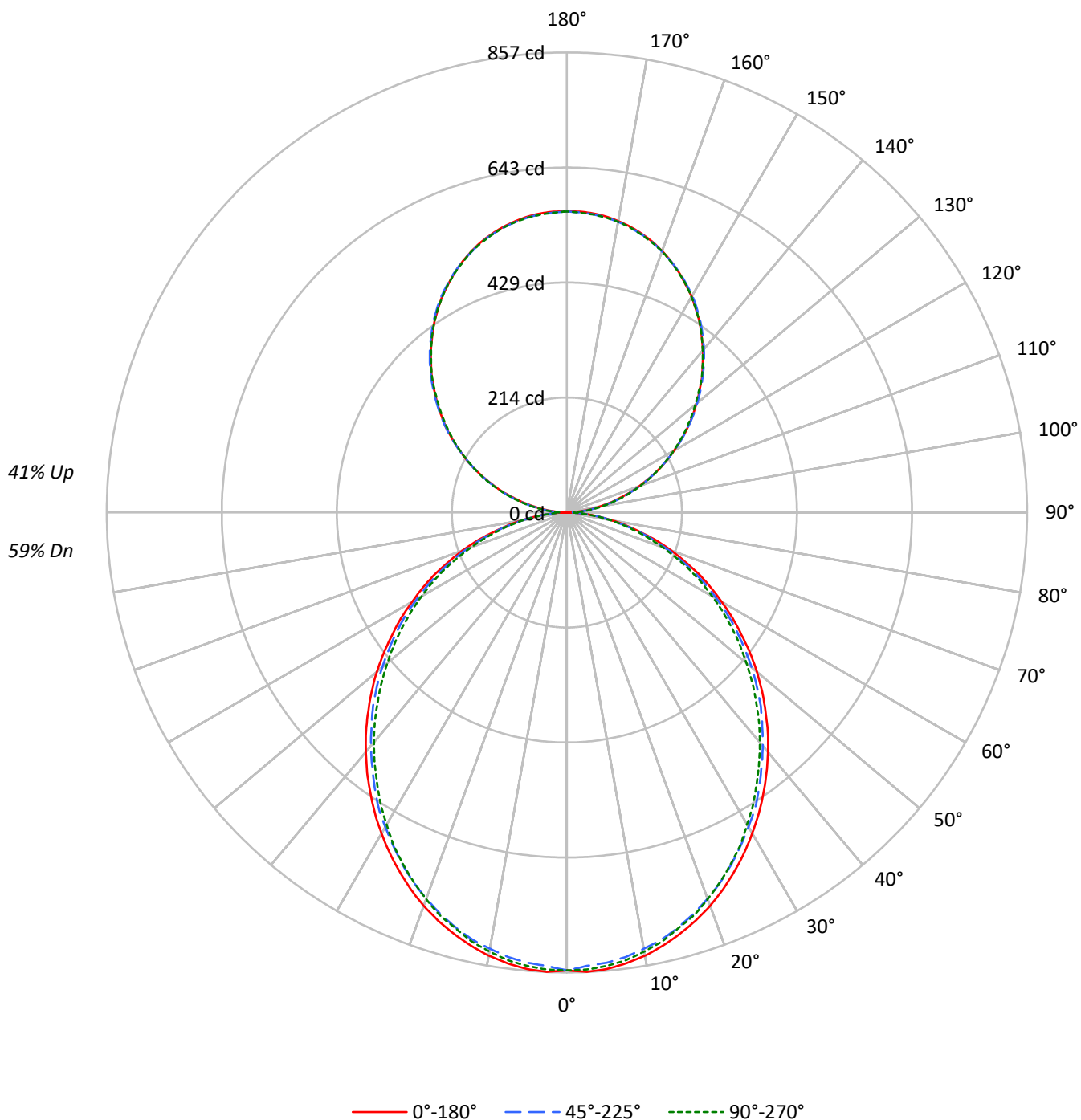
Lumens per Lamp: N/A
Luminaire Lumens: 3775.0 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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		102	102	102	102		88	88	88		76	76	76		64	64	64
1	100	95	91	88		93	89	86	82		77	75	72		67	65	63		57	55	54
2	91	83	77	72		84	78	72	68		68	64	60		58	55	53		50	48	46
3	83	73	66	60		77	68	62	56		60	55	50		52	48	44		44	41	39
4	76	65	57	50		70	61	53	48		53	47	43		46	42	38		39	36	33
5	70	58	49	43		65	54	47	41		48	42	37		41	37	33		36	32	29
6	64	52	44	38		60	49	41	36		43	37	32		37	33	29		32	29	26
7	59	47	39	33		55	44	37	32		39	33	29		34	29	26		29	26	23
8	55	43	35	29		51	40	33	28		35	30	25		31	26	23		27	23	20
9	51	39	31	26		48	37	30	25		33	27	23		29	24	21		25	21	18
10	48	36	28	23		45	34	27	23		30	24	21		27	22	19		23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9182	9182	9182
5°	9204	8865	8852
10°	9122	8564	8477
15°	8996	8253	8069
20°	8851	7906	7664
25°	8663	7541	7232
30°	8457	7162	6776
35°	8241	6776	6324
40°	8015	6370	5880
45°	7767	5975	5415
50°	7514	5535	4949
55°	7190	5075	4476
60°	6857	4569	3974
65°	6541	4021	3449
70°	6090	3413	2837
75°	5440	2703	2202
80°	4696	1900	1557
85°	3660	1022	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	2.1
10°-20°	227.1	6.0
20°-30°	335.4	8.9
30°-40°	391.7	10.4
40°-50°	393.8	10.4
50°-60°	345.9	9.2
60°-70°	257.6	6.8
70°-80°	146.6	3.9
80°-90°	42.9	1.1
90°-100°	36.1	1.0
100°-110°	109.3	2.9
110°-120°	186.0	4.9
120°-130°	244.7	6.5
130°-140°	275.0	7.3
140°-150°	270.4	7.2
150°-160°	227.7	6.0
160°-170°	151.6	4.0
170°-180°	53.1	1.4
0°-30°	642.8	17.0
0°-40°	1034.5	27.4
0°-60°	1774.1	47.0
0°-90°	2221.2	58.8
90°-120°	331.4	8.8
90°-150°	1121.5	29.7
90°-180°	1554.0	41.2
0°-180°	3775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	854	850	842	849	848	81
15°	813	810	800	806	802	229
25°	738	734	724	725	722	340
35°	638	634	624	620	616	399
45°	523	520	510	502	498	404
55°	397	396	386	378	375	355
65°	271	267	260	254	252	267
75°	143	140	138	134	132	153
85°	38	37	37	35	35	41
90°	0	5	11	12	13	5
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°	853.0	853.0	853.0	853.0	853.0
2.5°	856.7	853.7	845.7	853.0	852.3
5°	853.7	850.1	842.0	849.3	847.9
7.5°	847.1	843.5	835.4	842.0	841.3
10°	838.3	834.7	825.1	831.7	830.3
12.5°	826.6	823.7	814.9	819.3	818.5
15°	812.7	809.7	800.2	806.1	801.7
17.5°	797.3	793.6	784.1	788.5	787.0
20°	779.7	775.3	765.7	768.7	766.5
22.5°	759.9	755.5	745.9	748.1	745.2
25°	737.9	733.5	723.9	724.7	722.5
27.5°	715.1	710.7	700.4	701.2	699.0
30°	690.2	686.5	676.2	676.2	671.1
32.5°	665.2	660.1	652.8	647.6	645.4
35°	638.1	633.7	624.2	619.8	616.1
37.5°	611.0	605.1	595.6	590.4	588.2
40°	582.4	578.0	567.7	561.8	558.9
42.5°	553.8	548.6	538.4	532.5	529.6
45°	523.0	520.0	510.5	501.7	498.0
47.5°	492.9	488.5	479.7	470.9	467.9
50°	462.1	458.4	448.9	440.8	436.4
52.5°	429.8	427.6	417.3	410.7	406.3
55°	396.8	396.1	386.5	378.5	374.8
57.5°	366.0	363.1	355.7	348.4	344.0
60°	332.3	331.5	322.7	316.1	312.5
62.5°	302.2	300.0	291.2	284.6	282.4
65°	270.6	267.0	259.6	253.8	251.6
67.5°	236.9	234.0	228.1	223.0	220.0
70°	206.8	202.4	198.0	192.9	189.2
72.5°	175.3	172.4	167.2	162.8	161.4
75°	143.0	140.1	137.9	134.2	132.0
77.5°	114.4	113.0	110.0	107.1	107.1
80°	86.5	84.3	82.9	82.1	82.1
82.5°	59.4	59.4	59.4	57.9	57.2
85°	38.1	36.7	36.7	35.2	35.2
87.5°	19.1	16.9	16.1	15.4	15.4
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)