

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: P1031750

Luminaire Tested: S123DIW-B560D1320UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031750
REPORT IS A COMBINATION OF REPORTS P991636 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB50-4F0-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

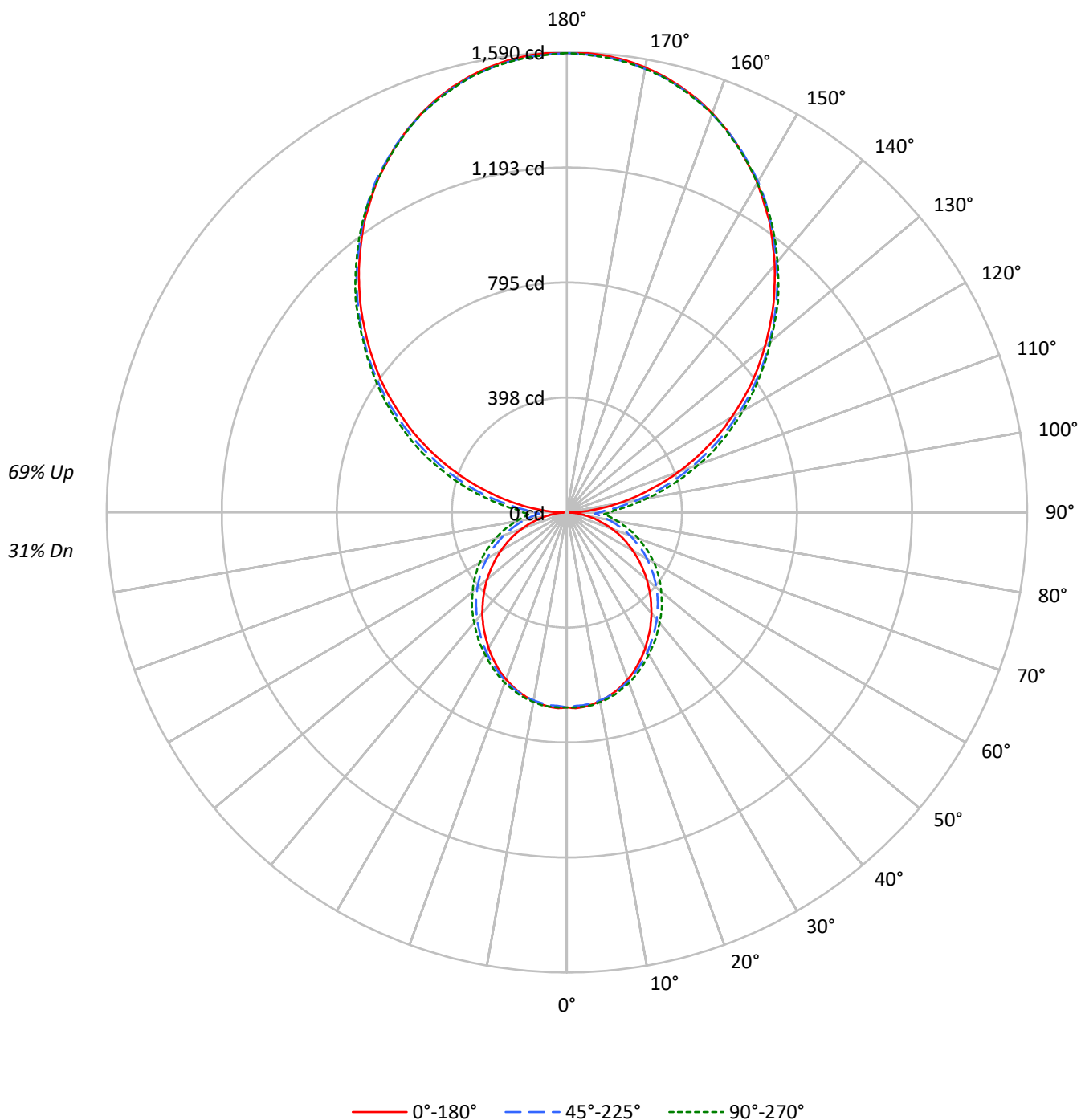
Lumens per Lamp: N/A
Luminaire Lumens: 6667.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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	50	30	10
RCR																				
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	31
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31	31	31	25
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26	26	26	20
3	77	67	60	54	68	61	54	49	48	43	40	36	33	31	25	23	22	22	22	17
4	70	59	51	45	62	53	47	41	42	37	34	32	29	26	22	20	19	19	19	14
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16	16	16	12
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14	14	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	12	12	9
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11	11	11	8
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10	10	10	8
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9	9	9	7

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	1.0
10°-20°	182.1	2.7
20°-30°	272.3	4.1
30°-40°	325.1	4.9
40°-50°	340.2	5.1
50°-60°	319.2	4.8
60°-70°	266.6	4.0
70°-80°	190.7	2.9
80°-90°	116.8	1.8
90°-100°	173.5	2.6
100°-110°	361.8	5.4
110°-120°	561.8	8.4
120°-130°	713.0	10.7
130°-140°	788.0	11.8
140°-150°	767.7	11.5
150°-160°	644.8	9.7
160°-170°	429.2	6.4
170°-180°	150.3	2.3
0°-30°	518.3	7.8
0°-40°	843.4	12.7
0°-60°	1502.8	22.5
0°-90°	2076.9	31.2
90°-120°	1097.1	16.5
90°-150°	3365.8	50.5
90°-180°	4590.0	68.8
0°-180°	6667.0	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°	11	59	113	143	153	12
95°	82	119	165	193	200	87
105°	287	307	349	370	379	306
115°	534	546	570	589	594	529
125°	778	782	801	811	811	694
135°	1008	1015	1022	1030	1031	777
145°	1222	1224	1228	1232	1230	763
155°	1399	1399	1400	1405	1396	644
165°	1523	1520	1520	1527	1518	430
175°	1584	1580	1580	1587	1578	151
180°	1588	1588	1588	1588	1588	

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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°	10.7	59.2	112.8	142.7	152.6
92.5°	46.2	85.2	129.4	157.3	161.4
95°	81.7	119.0	164.9	192.7	200.0
97.5°	128.3	161.0	202.9	231.2	237.3
100°	176.3	207.3	247.2	272.2	282.0
102.5°	231.7	256.0	297.7	322.0	328.1
105°	286.6	306.7	349.4	370.0	379.1
107.5°	350.7	367.3	402.4	426.0	431.3
110°	409.9	425.6	457.4	481.5	484.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	472.3	483.8	511.6	536.2	542.8
115°	533.9	546.5	570.4	589.2	593.8
117.5°	597.6	604.6	627.1	644.7	646.8
120°	655.4	666.6	684.5	700.2	702.8
122.5°	716.5	723.0	743.2	755.7	757.0
125°	778.2	782.0	800.8	811.2	811.3
127.5°	835.6	842.4	858.2	865.4	865.5
130°	893.0	902.3	913.1	922.1	917.8
132.5°	949.7	959.7	968.2	975.1	974.0
135°	1008.3	1015.0	1021.9	1030.1	1031.3
137.5°	1062.0	1067.4	1076.4	1081.8	1081.8
140°	1117.3	1123.6	1127.0	1136.8	1131.7
142.5°	1168.5	1174.0	1176.5	1184.8	1182.2
145°	1222.1	1223.9	1227.7	1232.3	1230.2
147.5°	1267.6	1272.6	1276.3	1278.5	1273.9
150°	1316.2	1318.7	1321.2	1321.2	1315.2
152.5°	1356.2	1359.9	1361.1	1363.6	1357.4
155°	1398.6	1398.6	1399.8	1404.8	1396.1
157.5°	1434.8	1433.5	1434.8	1439.7	1432.3
160°	1468.4	1465.9	1465.9	1472.2	1467.2
162.5°	1498.4	1494.6	1495.9	1502.1	1493.4
165°	1523.3	1519.6	1519.6	1527.1	1518.3
167.5°	1544.5	1539.6	1540.8	1548.3	1540.8
170°	1562.0	1557.0	1557.0	1565.8	1557.0
172.5°	1575.7	1570.7	1570.7	1578.2	1569.5
175°	1584.5	1579.5	1579.5	1587.0	1578.2
177.5°	1589.5	1584.5	1584.5	1592.0	1583.2
180°	1588.2	1588.2	1588.2	1588.2	1588.2

(END OF REPORT)