

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: P1031749

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031749
REPORT IS A COMBINATION OF REPORTS P991635 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-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

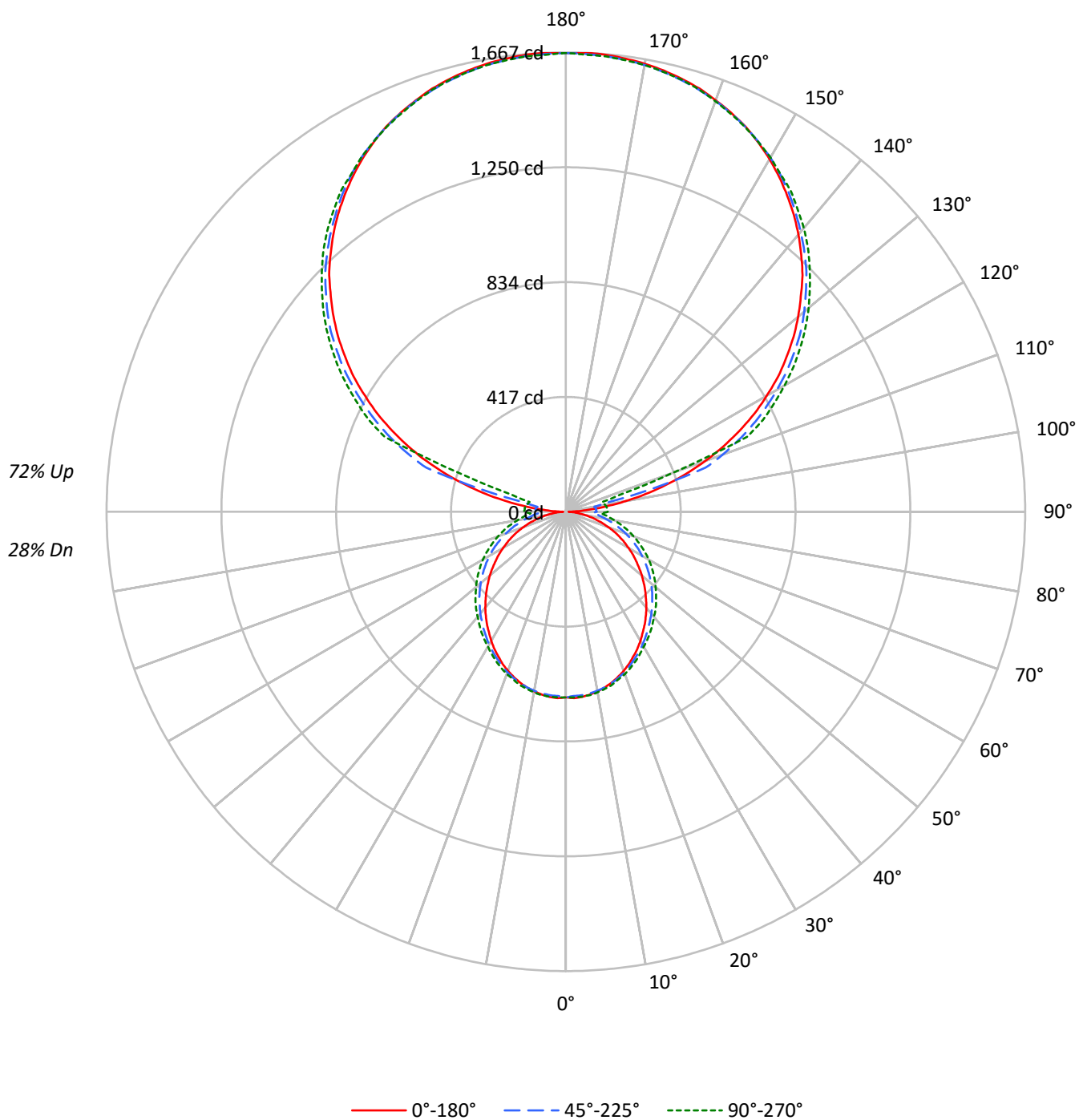
Lumens per Lamp: N/A
Luminaire Lumens: 7342.0 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	46	44	43	31	30	29
2	84	76	70	65	75	68	63	59	53	50	47	40	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	43	39	35	32	29	24	22	20
4	70	59	51	45	62	53	46	41	41	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	12
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	12	12	10	8

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	0.9
10°-20°	182.1	2.5
20°-30°	272.3	3.7
30°-40°	325.1	4.4
40°-50°	340.2	4.6
50°-60°	319.2	4.3
60°-70°	266.6	3.6
70°-80°	190.7	2.6
80°-90°	116.8	1.6
90°-100°	130.0	1.8
100°-110°	336.3	4.6
110°-120°	730.6	10.0
120°-130°	903.0	12.3
130°-140°	952.3	13.0
140°-150°	884.0	12.0
150°-160°	711.5	9.7
160°-170°	459.2	6.3
170°-180°	158.2	2.2
0°-30°	518.3	7.1
0°-40°	843.4	11.5
0°-60°	1502.8	20.5
0°-90°	2076.9	28.3
90°-120°	1196.9	16.3
90°-150°	3936.2	53.6
90°-180°	5265.0	71.7
0°-180°	7342.0	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	142	152	11
95°	84	61	111	142	150	96
105°	374	406	326	128	137	397
115°	695	711	749	779	790	687
125°	977	987	1013	1031	1038	873
135°	1215	1222	1235	1252	1252	935
145°	1401	1409	1411	1420	1423	877
155°	1542	1540	1541	1547	1540	711
165°	1627	1623	1622	1632	1623	460
175°	1665	1659	1660	1669	1659	158
180°	1665	1665	1665	1665	1665	

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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	59.1	112.6	142.4	152.3
92.5°	37.2	61.3	109.2	142.0	149.9
95°	83.6	61.4	110.9	142.4	149.7
97.5°	144.6	136.4	107.8	139.7	148.3
100°	215.6	263.9	104.6	135.8	144.4
102.5°	296.6	333.2	150.9	130.7	140.5
105°	374.5	405.7	325.9	127.6	136.6
107.5°	456.6	483.1	531.8	361.1	205.6
110°	538.8	561.9	604.8	583.0	412.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	617.9	636.9	678.3	707.8	711.9
115°	695.2	711.4	748.9	778.9	789.6
117.5°	771.8	786.3	817.5	845.0	852.0
120°	841.5	856.4	884.3	911.1	916.2
122.5°	913.3	923.5	951.1	973.5	979.8
125°	976.9	986.8	1013.1	1030.9	1038.5
127.5°	1041.2	1050.4	1074.9	1093.3	1096.0
130°	1100.6	1109.8	1129.4	1148.3	1150.2
132.5°	1156.8	1166.7	1181.4	1199.6	1201.0
135°	1214.9	1221.6	1234.6	1251.5	1251.5
137.5°	1264.4	1273.5	1281.2	1299.1	1300.3
140°	1313.1	1320.5	1326.4	1342.4	1343.6
142.5°	1358.9	1365.6	1369.3	1382.5	1382.5
145°	1400.9	1408.9	1411.4	1419.7	1422.6
147.5°	1441.0	1447.2	1449.7	1454.4	1451.1
150°	1478.1	1481.9	1484.3	1486.8	1484.6
152.5°	1511.5	1512.8	1514.0	1519.0	1512.8
155°	1542.5	1540.0	1541.2	1547.4	1540.0
157.5°	1567.2	1567.2	1566.0	1573.4	1563.5
160°	1589.5	1588.2	1587.0	1594.4	1585.8
162.5°	1610.5	1606.8	1605.6	1614.2	1606.8
165°	1626.6	1622.9	1621.6	1631.5	1622.9
167.5°	1640.2	1635.2	1635.2	1645.1	1635.2
170°	1651.3	1646.4	1646.4	1656.3	1646.4
172.5°	1658.7	1652.6	1653.8	1663.7	1652.6
175°	1664.9	1658.7	1660.0	1668.6	1658.7
177.5°	1667.4	1661.2	1662.5	1672.3	1660.0
180°	1664.9	1664.9	1664.9	1664.9	1664.9

(END OF REPORT)