

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: P1031732

Luminaire Tested: S123DIW-B560D1320UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031732
REPORT IS A COMBINATION OF REPORTS P991609 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1320UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

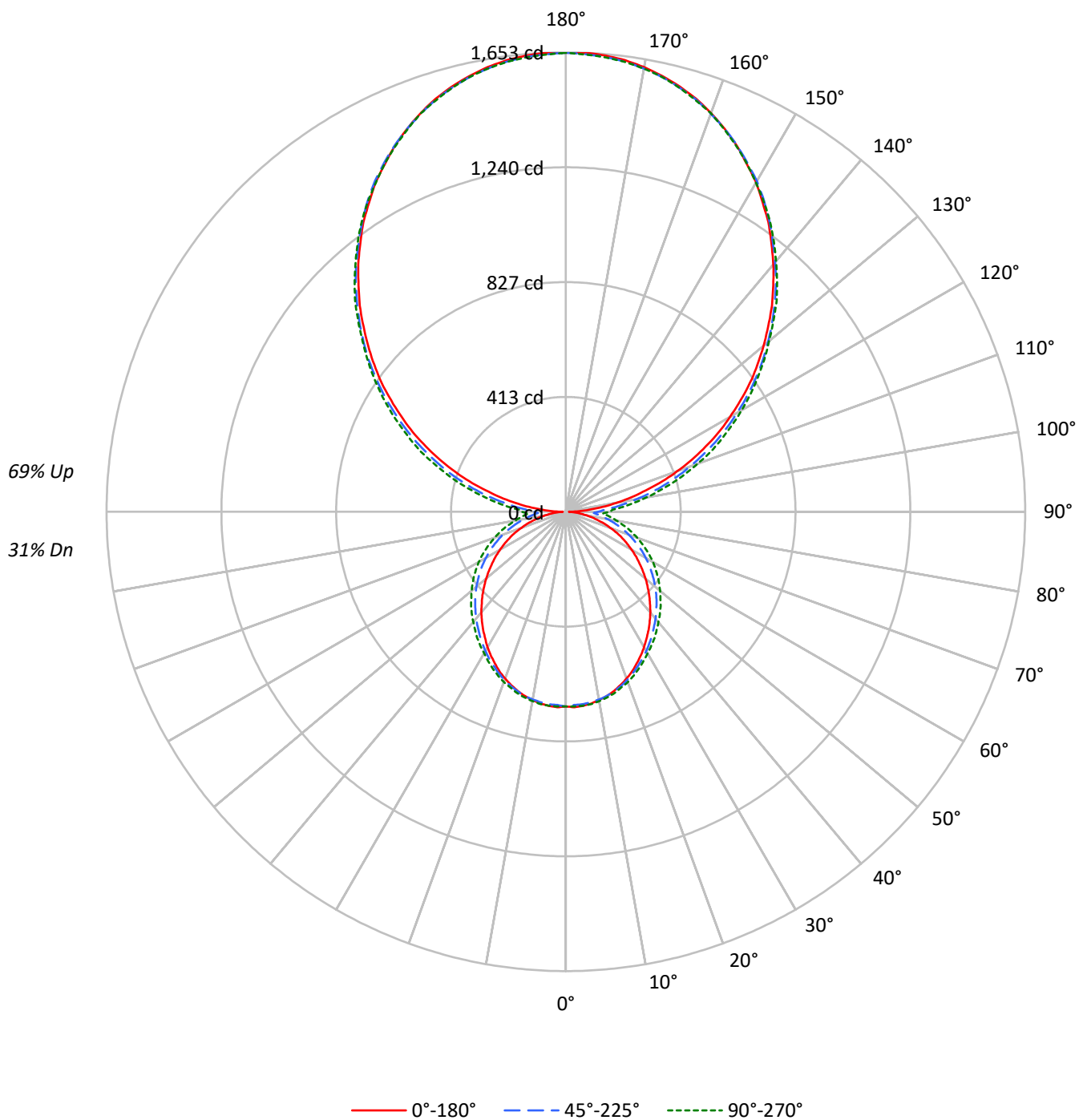
Lumens per Lamp: N/A
Luminaire Lumens: 6934.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7539	7539	7539
5°	7560	7318	7312
10°	7489	7120	7065
15°	7390	6901	6804
20°	7249	6657	6523
25°	7077	6382	6232
30°	6899	6133	5940
35°	6700	5873	5702
40°	6511	5634	5451
45°	6300	5403	5243
50°	6091	5174	5018
55°	5862	4940	4812
60°	5637	4699	4600
65°	5405	4444	4351
70°	5056	4156	4096
75°	4614	3828	3832
80°	4099	3498	3531
85°	3592	3230	3314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6300 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	1.0
10°-20°	189.4	2.7
20°-30°	283.3	4.1
30°-40°	338.2	4.9
40°-50°	353.8	5.1
50°-60°	332.1	4.8
60°-70°	277.4	4.0
70°-80°	198.3	2.9
80°-90°	121.5	1.8
90°-100°	180.5	2.6
100°-110°	376.3	5.4
110°-120°	584.3	8.4
120°-130°	741.5	10.7
130°-140°	819.4	11.8
140°-150°	798.4	11.5
150°-160°	670.5	9.7
160°-170°	446.4	6.4
170°-180°	156.3	2.3
0°-30°	539.1	7.8
0°-40°	877.3	12.7
0°-60°	1563.2	22.5
0°-90°	2160.4	31.2
90°-120°	1141.0	16.5
90°-150°	3500.4	50.5
90°-180°	4774.0	68.8
0°-180°	6934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	701	700	695	701	700	67
15°	668	670	669	677	676	188
25°	603	610	613	623	623	278
35°	519	531	541	552	556	324
45°	424	442	462	476	482	327
55°	324	349	376	397	403	290
65°	224	253	287	310	317	221
75°	121	157	195	220	230	130
85°	37	76	116	142	150	38
90°	11	62	117	148	159	13
95°	85	124	172	200	208	91
105°	298	319	363	385	394	319
115°	555	568	593	613	618	550
125°	809	813	833	844	844	722
135°	1049	1056	1063	1071	1072	808
145°	1271	1273	1277	1282	1279	794
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.4	700.4	700.4	700.4	700.4
2.5°	704.2	702.0	695.9	702.0	701.2
5°	701.2	699.7	695.1	701.2	700.4
7.5°	695.9	695.9	691.3	698.9	698.1
10°	688.2	689.7	685.9	693.6	692.0
12.5°	679.1	681.4	679.1	685.9	684.4
15°	667.6	669.9	669.1	676.8	676.0
17.5°	653.9	658.5	657.7	664.6	663.0
20°	638.6	643.2	644.7	651.6	652.4
22.5°	622.6	627.2	629.5	638.6	637.9
25°	602.8	610.4	612.7	622.6	622.6
27.5°	583.7	592.1	596.7	605.1	605.8
30°	563.1	573.0	579.1	588.3	588.3
32.5°	540.2	551.6	560.0	570.0	572.2
35°	518.8	531.0	541.0	552.4	555.5
37.5°	495.9	509.7	521.1	534.1	536.4
40°	473.1	486.8	502.1	515.0	518.1
42.5°	447.9	465.4	481.5	495.9	500.5
45°	424.2	442.5	461.6	476.1	482.2
47.5°	399.0	419.6	441.0	457.0	461.6
50°	374.6	396.0	419.6	437.2	442.5
52.5°	348.7	371.6	398.3	416.6	423.5
55°	323.5	348.7	376.2	396.8	402.9
57.5°	299.1	325.0	354.8	375.4	382.3
60°	273.2	300.6	331.9	353.3	361.7
62.5°	248.7	277.0	310.5	331.9	339.5
65°	223.6	253.3	286.9	309.8	317.4
67.5°	198.4	229.7	263.2	288.4	294.5
70°	171.7	204.5	241.1	265.5	273.2
72.5°	147.3	180.1	218.2	243.4	251.0
75°	121.3	157.2	195.3	220.5	229.7
77.5°	99.2	135.1	173.2	199.9	206.8
80°	75.5	112.9	152.6	178.5	186.2
82.5°	54.9	93.1	133.5	159.5	167.1
85°	37.4	75.5	116.0	141.9	149.5
87.5°	22.9	61.0	100.0	125.9	133.5
90°	11.2	61.6	117.3	148.5	158.7
92.5°	48.1	88.7	134.6	163.7	168.0
95°	85.0	123.7	171.5	200.4	208.0
97.5°	133.5	167.4	211.1	240.4	246.8
100°	183.4	215.5	257.1	283.1	293.3
102.5°	240.9	266.2	309.6	334.9	341.2
105°	298.0	318.9	363.4	384.8	394.3
107.5°	364.7	382.1	418.5	443.0	448.6
110°	426.3	442.6	475.7	500.8	504.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	491.2	503.1	532.1	557.6	564.5
115°	555.2	568.3	593.1	612.8	617.6
117.5°	621.4	628.8	652.2	670.5	672.7
120°	681.7	693.3	711.9	728.2	730.9
122.5°	745.3	751.9	772.9	785.9	787.4
125°	809.3	813.2	832.7	843.5	843.7
127.5°	869.0	876.0	892.5	900.0	900.1
130°	928.7	938.3	949.7	959.0	954.5
132.5°	987.6	998.0	1006.9	1014.1	1012.9
135°	1048.6	1055.6	1062.7	1071.3	1072.5
137.5°	1104.4	1110.1	1119.3	1125.0	1125.0
140°	1162.0	1168.5	1172.1	1182.2	1176.9
142.5°	1215.2	1220.9	1223.5	1232.1	1229.4
145°	1271.0	1272.8	1276.7	1281.5	1279.4
147.5°	1318.2	1323.4	1327.3	1329.6	1324.8
150°	1368.8	1371.4	1374.0	1374.0	1367.7
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)