

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: P1031183

Luminaire Tested: S123RDIW-B560D1320UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031183
REPORT IS A COMBINATION OF REPORTS P994442 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D1320UB2750-4F0-XX-W2A-F_5000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

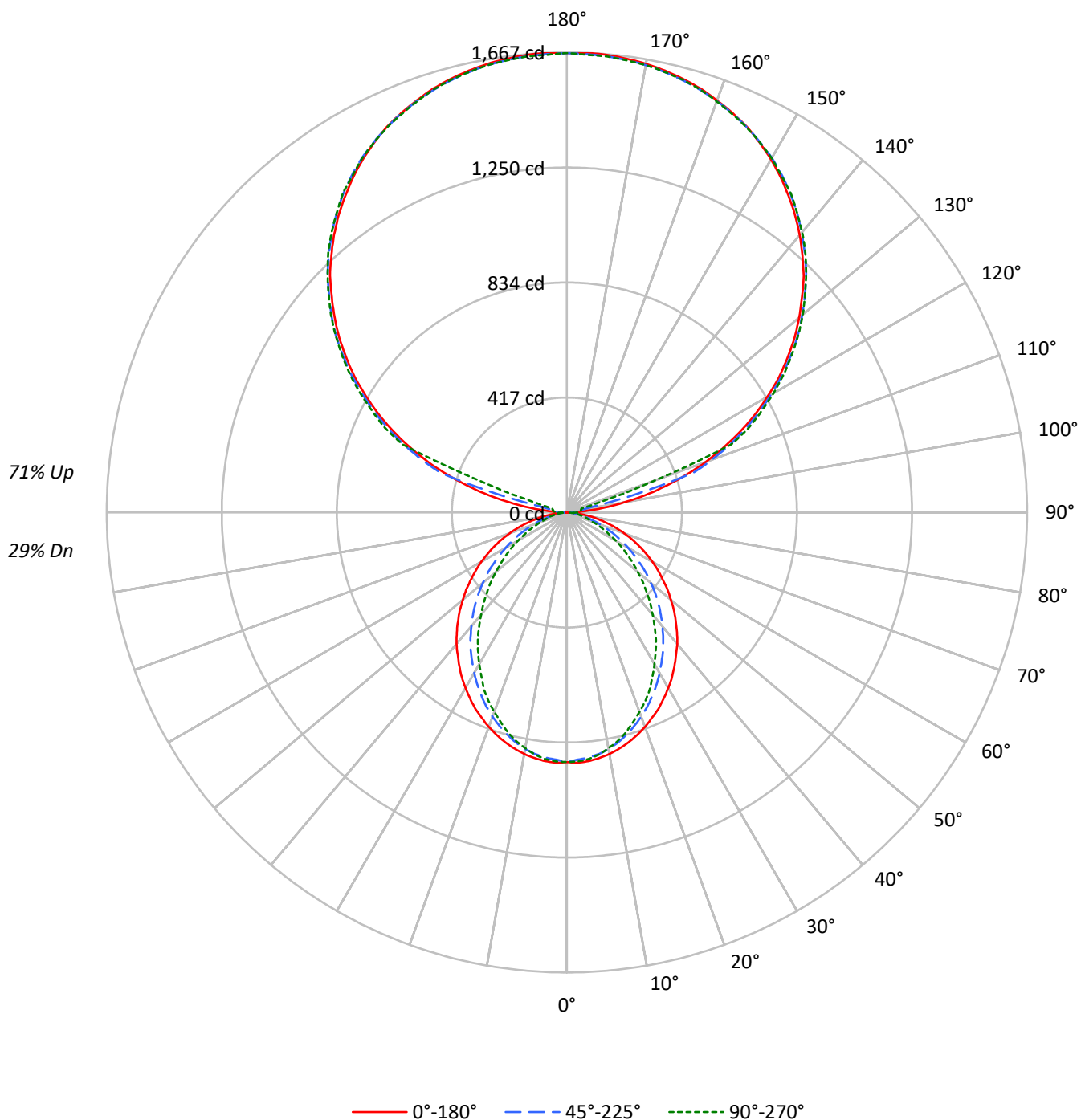
Lumens per Lamp: N/A
Luminaire Lumens: 7122.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	102	102	102	102	91	91	91	91	72	72	72		53	53	53		37
1	93	89	85	82	83	80	77	74	63	61	59		47	46	45		33
2	85	78	72	67	76	70	65	61	55	52	49		42	39	38		29
3	78	69	62	56	69	62	56	51	49	45	41		37	34	32		26
4	71	61	53	47	63	55	48	43	43	39	35		33	30	27		23
5	65	54	46	41	58	49	42	37	39	34	30		30	26	24		21
6	60	48	41	35	53	44	37	32	35	30	26		27	23	21		19
7	55	44	36	31	49	39	33	28	32	27	23		24	21	18		17
8	51	39	32	27	46	36	29	25	29	24	21		22	19	16		16
9	48	36	29	24	43	33	26	22	26	22	18		20	17	15		15
10	44	33	26	21	40	30	24	20	24	20	16		19	15	13		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9734	9734	9734
5°	9750	9389	9364
10°	9673	9037	8858
15°	9547	8600	8305
20°	9383	8126	7685
25°	9213	7632	7099
30°	8996	7108	6406
35°	8771	6593	5774
40°	8559	6033	5077
45°	8288	5486	4450
50°	7991	4901	3801
55°	7681	4275	3206
60°	7385	3634	2602
65°	7003	2977	2032
70°	6523	2250	1451
75°	5831	1523	1149
80°	4978	1059	806
85°	3737	571	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	1.2
10°-20°	236.5	3.3
20°-30°	340.5	4.8
30°-40°	383.4	5.4
40°-50°	366.8	5.2
50°-60°	300.2	4.2
60°-70°	202.4	2.8
70°-80°	101.5	1.4
80°-90°	29.9	0.4
90°-100°	58.7	0.8
100°-110°	283.9	4.0
110°-120°	695.6	9.8
120°-130°	883.1	12.4
130°-140°	943.4	13.2
140°-150°	882.1	12.4
150°-160°	711.5	10.0
160°-170°	459.2	6.4
170°-180°	158.2	2.2
0°-30°	662.0	9.3
0°-40°	1045.4	14.7
0°-60°	1712.5	24.0
0°-90°	2046.3	28.7
90°-120°	1038.2	14.6
90°-150°	3746.7	52.6
90°-180°	5076.0	71.3
0°-180°	7122.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	901	892	898	897	86
15°	862	854	834	830	825	243
25°	785	766	733	717	709	361
35°	679	653	607	576	562	425
45°	558	525	469	427	409	431
55°	424	388	326	283	268	380
65°	290	249	192	156	148	287
75°	153	118	78	70	69	163
85°	39	23	20	19	19	43
90°	1	14	30	35	37	7
95°	76	25	38	47	47	90
105°	369	382	271	52	54	391
115°	692	699	710	722	727	683
125°	975	985	990	992	994	871
135°	1213	1221	1226	1230	1226	934
145°	1400	1409	1411	1414	1414	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°	904.3	904.3	904.3	904.3	904.3
2.5°	908.0	905.0	896.2	904.3	902.8
5°	904.3	900.6	891.8	898.4	897.0
7.5°	897.7	894.0	883.0	887.4	885.2
10°	888.9	883.8	870.6	871.3	867.6
12.5°	876.4	870.6	853.7	853.0	848.6
15°	862.5	854.4	833.9	830.2	825.1
17.5°	845.6	836.8	811.2	803.8	796.5
20°	826.6	814.8	787.0	777.4	768.6
22.5°	805.3	791.4	761.3	748.8	740.8
25°	784.8	766.4	732.7	717.3	709.2
27.5°	759.8	740.0	703.4	682.8	670.3
30°	734.2	712.2	671.1	646.1	634.4
32.5°	708.5	682.8	638.8	610.9	598.5
35°	679.2	652.7	607.3	575.7	562.5
37.5°	649.8	621.2	573.5	538.3	522.2
40°	621.9	589.7	537.6	499.5	482.6
42.5°	590.4	558.1	503.9	461.3	446.7
45°	558.1	525.1	468.7	426.9	409.3
47.5°	526.6	489.9	434.2	388.7	373.3
50°	491.4	456.9	397.5	352.0	335.2
52.5°	459.9	421.7	363.0	315.4	300.7
55°	423.9	388.0	325.6	283.1	268.4
57.5°	391.6	352.8	289.7	249.4	236.9
60°	357.9	317.6	256.7	217.1	204.6
62.5°	324.2	283.8	223.0	186.3	173.1
65°	289.7	249.4	192.2	156.2	148.2
67.5°	255.2	214.2	158.4	131.3	122.5
70°	221.5	181.9	130.5	104.9	96.8
72.5°	187.8	148.9	103.4	83.6	81.4
75°	153.3	118.1	77.7	70.4	68.9
77.5°	121.7	89.5	60.9	56.5	55.0
80°	91.7	61.6	46.2	44.0	42.5
82.5°	63.1	38.1	33.0	30.8	30.8
85°	38.9	22.7	20.5	19.1	19.1
87.5°	17.6	9.5	9.5	8.8	8.1
90°	1.2	13.6	29.7	34.6	37.1
92.5°	28.4	21.0	32.2	40.8	42.1
95°	75.5	24.7	38.3	47.0	47.0
97.5°	137.3	102.7	39.6	49.5	50.7
100°	209.0	233.8	40.8	50.7	52.0
102.5°	290.7	306.8	91.5	50.7	53.2
105°	368.6	382.2	270.9	52.0	54.4
107.5°	451.5	462.6	481.2	290.7	128.6
110°	534.4	544.3	557.9	517.0	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	613.5	622.2	635.8	646.9	644.4
115°	691.5	698.9	710.0	722.4	727.3
117.5°	768.1	776.8	783.0	792.9	794.1
120°	838.6	849.8	853.5	863.4	863.4
122.5°	910.4	919.1	924.0	930.2	931.4
125°	974.7	984.6	989.6	992.0	994.5
127.5°	1039.0	1048.9	1055.1	1058.8	1056.4
130°	1098.4	1108.3	1113.3	1118.2	1115.7
132.5°	1155.3	1165.2	1168.9	1173.9	1170.2
135°	1213.4	1220.9	1225.8	1229.5	1225.8
137.5°	1262.9	1272.8	1275.3	1281.5	1279.0
140°	1312.4	1319.8	1323.5	1328.5	1326.0
142.5°	1358.2	1365.6	1369.3	1373.0	1369.3
145°	1400.2	1408.9	1411.4	1413.8	1413.8
147.5°	1441.0	1447.2	1449.7	1452.2	1446.0
150°	1478.1	1481.9	1484.3	1486.8	1483.1
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)