

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: P1032205

Luminaire Tested: S123RDIW-B340D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032205
REPORT IS A COMBINATION OF REPORTS P994233 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1320UB35-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

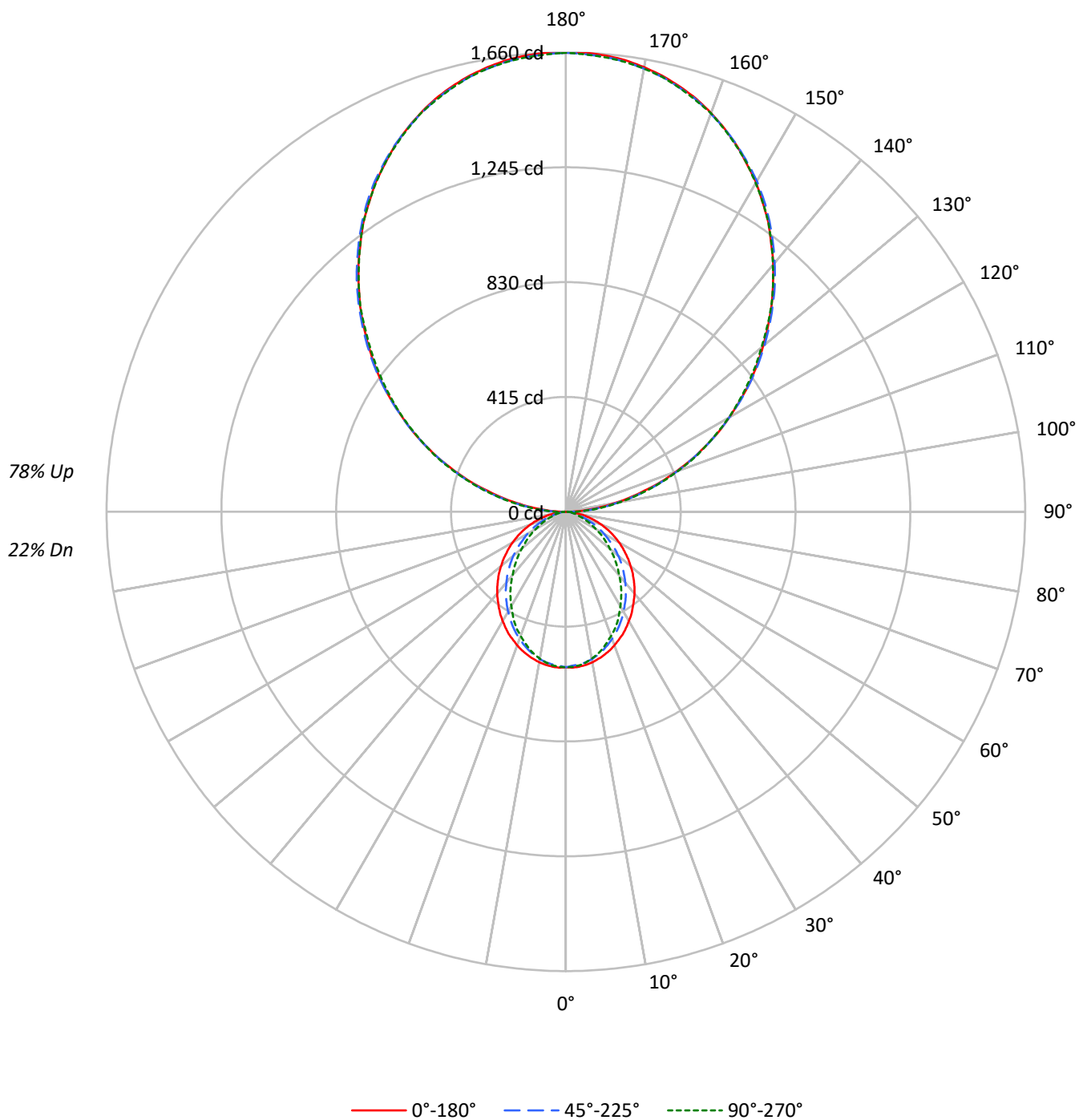
Lumens per Lamp: N/A
Luminaire Lumens: 5868.9 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30
1	92	87	84	81	81	78	75	72	59	57	55	42	41	40	27	26	26
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22
3	76	67	60	55	67	60	54	49	46	42	39	33	31	29	21	20	19
4	70	59	52	46	61	53	47	42	41	36	33	29	27	24	19	17	16
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14
6	59	47	40	34	52	42	36	31	33	28	25	24	21	18	15	14	12
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11
8	50	38	31	26	44	34	28	24	27	22	19	20	17	14	13	11	10
9	47	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9
10	43	32	25	21	38	29	23	19	22	18	15	17	14	12	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6046	6046	6046
5°	6056	5833	5817
10°	6008	5613	5502
15°	5930	5342	5158
20°	5828	5047	4774
25°	5723	4741	4409
30°	5587	4415	3979
35°	5449	4095	3587
40°	5316	3747	3154
45°	5149	3407	2764
50°	4963	3044	2361
55°	4771	2656	1991
60°	4587	2257	1616
65°	4349	1849	1261
70°	4052	1398	901
75°	3621	947	714
80°	3089	658	501
85°	2315	356	262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5149 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	0.9
10°-20°	146.9	2.5
20°-30°	211.5	3.6
30°-40°	238.2	4.1
40°-50°	227.8	3.9
50°-60°	186.5	3.2
60°-70°	125.7	2.1
70°-80°	63.1	1.1
80°-90°	20.0	0.3
90°-100°	106.8	1.8
100°-110°	323.2	5.5
110°-120°	550.2	9.4
120°-130°	723.9	12.3
130°-140°	813.7	13.9
140°-150°	799.9	13.6
150°-160°	673.4	11.5
160°-170°	448.3	7.6
170°-180°	157.0	2.7
0°-30°	411.2	7.0
0°-40°	649.4	11.1
0°-60°	1063.7	18.1
0°-90°	1272.5	21.7
90°-120°	980.2	16.7
90°-150°	3317.7	56.5
90°-180°	4596.0	78.3
0°-180°	5868.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	562	559	554	558	557	53
15°	536	531	518	516	512	151
25°	488	476	455	446	440	224
35°	422	406	377	358	349	264
45°	347	326	291	265	254	268
55°	263	241	202	176	167	236
65°	180	155	119	97	92	178
75°	95	73	48	44	43	101
85°	24	14	13	12	12	26
90°	1	14	31	36	39	7
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	561.7	561.7	561.7	561.7	561.7
2.5°	564.0	562.2	556.7	561.7	560.8
5°	561.7	559.4	554.0	558.1	557.2
7.5°	557.6	555.3	548.5	551.2	549.9
10°	552.1	549.0	540.8	541.2	538.9
12.5°	544.4	540.8	530.3	529.8	527.1
15°	535.7	530.7	518.0	515.7	512.5
17.5°	525.3	519.8	503.9	499.3	494.7
20°	513.4	506.1	488.8	482.9	477.4
22.5°	500.2	491.6	472.9	465.1	460.1
25°	487.5	476.1	455.1	445.5	440.5
27.5°	472.0	459.7	436.9	424.1	416.4
30°	456.0	442.4	416.8	401.4	394.1
32.5°	440.1	424.1	396.8	379.5	371.7
35°	421.9	405.5	377.2	357.6	349.4
37.5°	403.6	385.9	356.3	334.4	324.4
40°	386.3	366.3	333.9	310.2	299.8
42.5°	366.7	346.7	313.0	286.5	277.4
45°	346.7	326.2	291.1	265.1	254.2
47.5°	327.1	304.3	269.7	241.4	231.9
50°	305.2	283.8	246.9	218.7	208.2
52.5°	285.6	261.9	225.5	195.9	186.8
55°	263.3	241.0	202.3	175.8	166.7
57.5°	243.3	219.1	179.9	154.9	147.1
60°	222.3	197.3	159.4	134.8	127.1
62.5°	201.4	176.3	138.5	115.7	107.5
65°	179.9	154.9	119.4	97.0	92.0
67.5°	158.5	133.0	98.4	81.5	76.1
70°	137.6	113.0	81.1	65.1	60.1
72.5°	116.6	92.5	64.2	51.9	50.6
75°	95.2	73.3	48.3	43.7	42.8
77.5°	75.6	55.6	37.8	35.1	34.2
80°	56.9	38.3	28.7	27.3	26.4
82.5°	39.2	23.7	20.5	19.1	19.1
85°	24.1	14.1	12.8	11.8	11.8
87.5°	10.9	5.9	5.9	5.5	5.0
90°	1.3	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)