

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: P1031628

Luminaire Tested: S123DIW-B340D1535UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031628
REPORT IS A COMBINATION OF REPORTS P991363 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1535UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

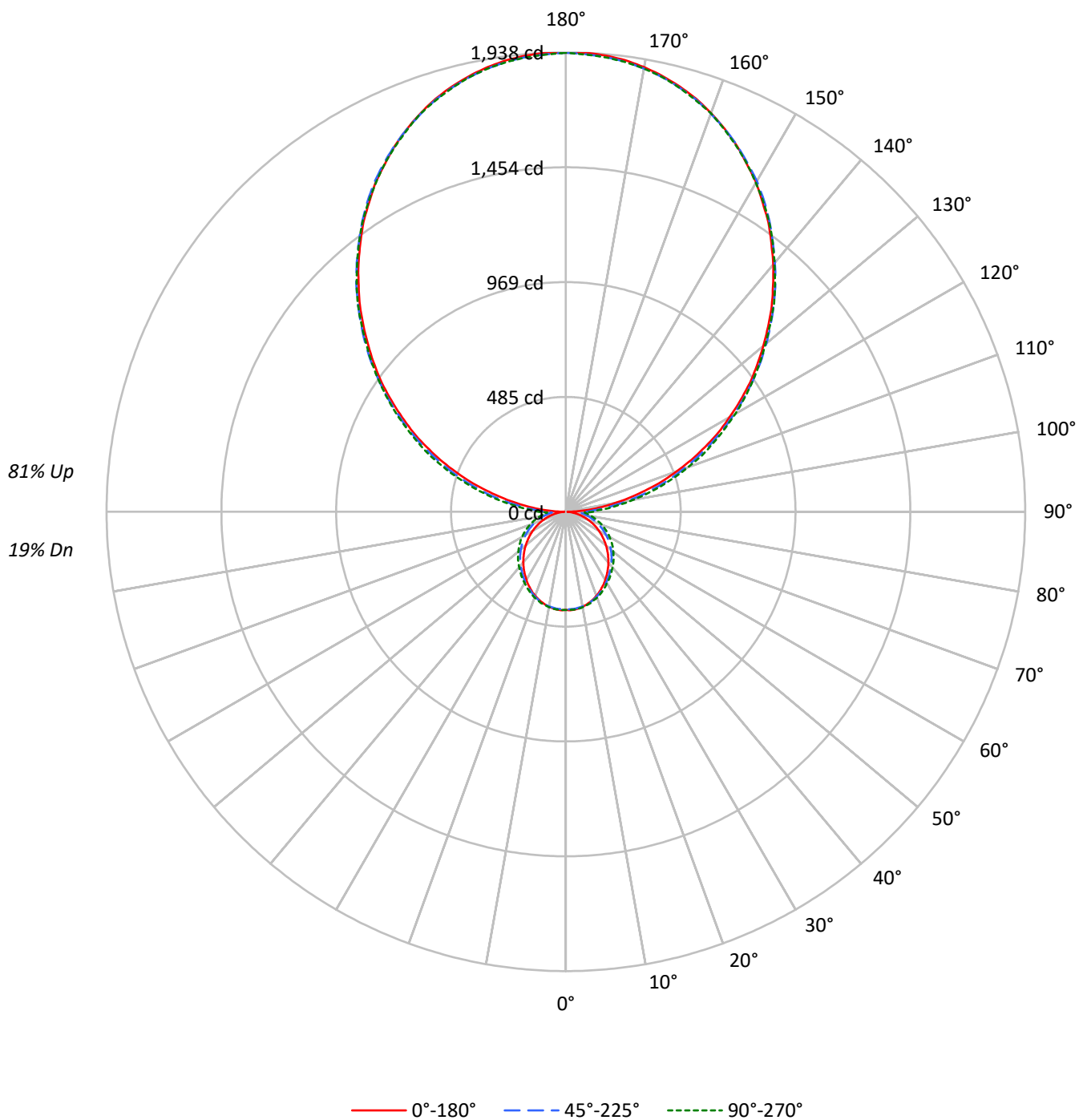
Lumens per Lamp: N/A
Luminaire Lumens: 6761.0 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	79	80	76	73	70	57	55	53	40	38	37	24	23	22
2	82	75	69	64	72	66	61	57	50	46	44	35	33	31	21	19	19
3	75	66	59	53	66	58	52	47	44	40	36	30	28	26	18	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	14	13	11
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	19	16	14	12	10	9
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	22	40	30	24	19	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4455	4455	4455
5°	4467	4324	4321
10°	4426	4207	4175
15°	4367	4078	4021
20°	4284	3934	3855
25°	4182	3771	3683
30°	4076	3624	3510
35°	3960	3471	3369
40°	3847	3329	3220
45°	3723	3193	3098
50°	3600	3058	2965
55°	3464	2919	2844
60°	3330	2776	2718
65°	3193	2625	2572
70°	2986	2456	2420
75°	2727	2262	2264
80°	2421	2068	2086
85°	2123	1908	1959

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3723 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	0.6
10°-20°	111.9	1.7
20°-30°	167.4	2.5
30°-40°	199.8	3.0
40°-50°	209.1	3.1
50°-60°	196.2	2.9
60°-70°	163.9	2.4
70°-80°	117.2	1.7
80°-90°	73.8	1.1
90°-100°	168.5	2.5
100°-110°	409.5	6.1
110°-120°	663.9	9.8
120°-130°	857.3	12.7
130°-140°	955.4	14.1
140°-150°	935.0	13.8
150°-160°	786.2	11.6
160°-170°	523.4	7.7
170°-180°	183.3	2.7
0°-30°	318.6	4.7
0°-40°	518.4	7.7
0°-60°	923.7	13.7
0°-90°	1278.6	18.9
90°-120°	1241.9	18.4
90°-150°	3989.6	59.0
90°-180°	5482.0	81.1
0°-180°	6761.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	414	413	411	414	414	39
15°	394	396	395	400	400	111
25°	356	361	362	368	368	164
35°	307	314	320	326	328	192
45°	251	262	273	281	285	193
55°	191	206	222	234	238	171
65°	132	150	170	183	188	131
75°	72	93	115	130	136	77
85°	22	45	68	84	88	23
90°	7	45	87	109	116	11
95°	95	123	157	177	182	103
105°	346	360	393	405	413	370
115°	649	659	672	684	686	642
125°	948	952	962	966	963	845
135°	1229	1237	1241	1243	1242	947
145°	1490	1492	1497	1499	1495	930
155°	1705	1705	1707	1713	1702	785
165°	1858	1853	1853	1862	1851	524
175°	1932	1926	1926	1935	1924	184
180°	1937	1937	1937	1937	1937	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.9	413.9	413.9	413.9	413.9
2.5°	416.1	414.8	411.2	414.8	414.3
5°	414.3	413.4	410.7	414.3	413.9
7.5°	411.2	411.2	408.5	413.0	412.5
10°	406.7	407.6	405.3	409.8	408.9
12.5°	401.3	402.6	401.3	405.3	404.4
15°	394.5	395.9	395.4	399.9	399.5
17.5°	386.4	389.1	388.6	392.7	391.8
20°	377.4	380.1	381.0	385.0	385.5
22.5°	367.9	370.6	372.0	377.4	376.9
25°	356.2	360.7	362.0	367.9	367.9
27.5°	344.9	349.9	352.6	357.5	358.0
30°	332.7	338.6	342.2	347.6	347.6
32.5°	319.2	326.0	330.9	336.8	338.1
35°	306.6	313.8	319.7	326.4	328.2
37.5°	293.1	301.2	307.9	315.6	317.0
40°	279.5	287.7	296.7	304.3	306.1
42.5°	264.7	275.0	284.5	293.1	295.8
45°	250.7	261.5	272.8	281.3	284.9
47.5°	235.8	248.0	260.6	270.1	272.8
50°	221.4	234.0	248.0	258.3	261.5
52.5°	206.0	219.6	235.4	246.2	250.2
55°	191.2	206.0	222.3	234.4	238.1
57.5°	176.7	192.1	209.7	221.8	225.9
60°	161.4	177.6	196.1	208.7	213.7
62.5°	147.0	163.7	183.5	196.1	200.6
65°	132.1	149.7	169.5	183.1	187.6
67.5°	117.2	135.7	155.5	170.4	174.0
70°	101.4	120.8	142.5	156.9	161.4
72.5°	87.0	106.4	128.9	143.8	148.3
75°	71.7	92.9	115.4	130.3	135.7
77.5°	58.6	79.8	102.3	118.1	122.2
80°	44.6	66.7	90.2	105.5	110.0
82.5°	32.5	55.0	78.9	94.2	98.7
85°	22.1	44.6	68.5	83.9	88.4
87.5°	13.5	36.1	59.1	74.4	78.9
90°	7.4	44.7	87.4	108.9	116.4
92.5°	51.0	79.6	111.2	130.7	131.7
95°	94.8	122.9	157.2	177.3	181.8
97.5°	152.1	175.9	206.2	227.4	230.4
100°	211.0	234.5	262.8	280.5	288.0
102.5°	279.0	296.1	327.1	344.2	347.3
105°	345.9	359.7	392.8	405.4	412.6
107.5°	424.6	435.5	460.1	476.9	479.3
110°	497.1	508.3	529.4	547.2	547.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.2	581.0	598.2	617.0	621.1
115°	648.8	658.8	672.0	684.3	686.4
117.5°	726.4	731.5	743.8	754.6	753.6
120°	797.4	808.9	816.0	824.9	825.1
122.5°	872.0	879.0	889.9	895.2	893.9
125°	947.6	952.2	962.2	965.6	962.7
127.5°	1017.6	1026.2	1034.5	1034.4	1031.4
130°	1087.6	1099.3	1103.7	1106.2	1098.3
132.5°	1157.1	1169.2	1173.0	1173.5	1169.0
135°	1228.6	1237.3	1240.7	1242.7	1241.9
137.5°	1294.0	1301.2	1308.9	1308.4	1306.2
140°	1362.0	1369.6	1372.5	1377.7	1369.3
142.5°	1424.4	1431.5	1434.6	1438.9	1433.5
145°	1489.8	1492.4	1496.9	1499.0	1494.7
147.5°	1545.6	1551.7	1556.3	1557.7	1550.3
150°	1604.9	1608.0	1611.0	1611.0	1602.8
152.5°	1653.6	1658.2	1659.7	1662.7	1655.1
155°	1705.3	1705.3	1706.9	1713.0	1702.3
157.5°	1749.5	1747.9	1749.5	1755.5	1746.4
160°	1790.5	1787.5	1787.5	1795.1	1789.0
162.5°	1827.0	1822.5	1824.0	1831.6	1821.0
165°	1857.5	1852.9	1852.9	1862.0	1851.4
167.5°	1883.3	1877.2	1878.8	1887.9	1878.8
170°	1904.6	1898.5	1898.5	1909.2	1898.5
172.5°	1921.4	1915.3	1915.3	1924.4	1913.8
175°	1932.0	1925.9	1925.9	1935.1	1924.4
177.5°	1938.1	1932.0	1932.0	1941.1	1930.5
180°	1936.6	1936.6	1936.6	1936.6	1936.6

(END OF REPORT)