

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: P1031587

Luminaire Tested: S123DIW-B340D1320UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031587
REPORT IS A COMBINATION OF REPORTS P991278 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

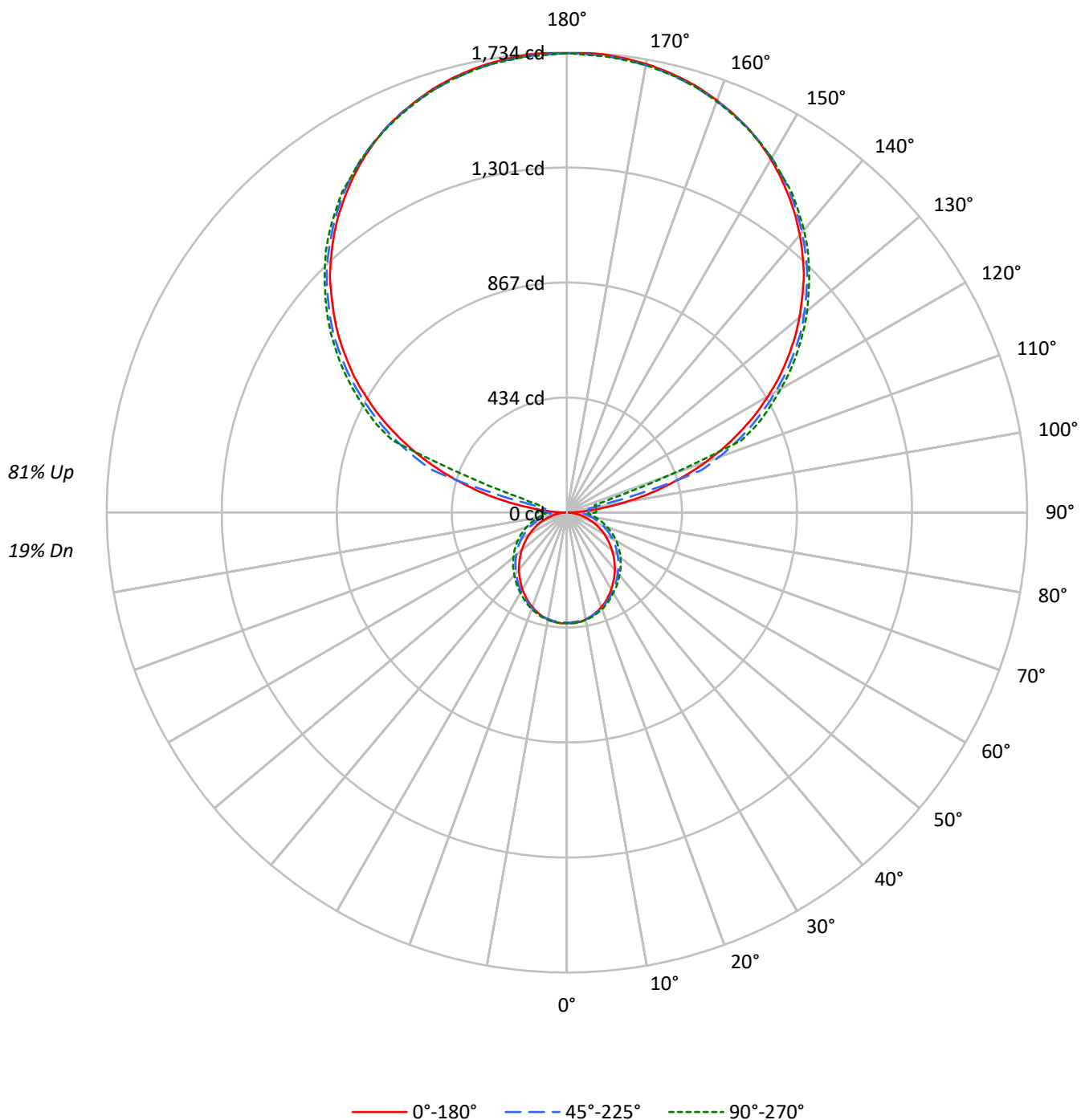
Lumens per Lamp: N/A
Luminaire Lumens: 6681.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	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	39	37	24	23	23
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19
3	75	66	59	53	66	58	52	47	44	40	36	31	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	15	13	12
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	20	17	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	20	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	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4481	4481	4481
5°	4493	4349	4346
10°	4451	4232	4199
15°	4392	4102	4044
20°	4308	3957	3877
25°	4205	3793	3704
30°	4101	3646	3530
35°	3981	3490	3389
40°	3869	3349	3239
45°	3744	3211	3116
50°	3620	3075	2982
55°	3484	2936	2859
60°	3349	2793	2733
65°	3213	2641	2586
70°	3004	2470	2433
75°	2743	2276	2277
80°	2438	2079	2098
85°	2132	1919	1970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3744 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	0.6
10°-20°	112.6	1.7
20°-30°	168.3	2.5
30°-40°	201.0	3.0
40°-50°	210.3	3.1
50°-60°	197.3	3.0
60°-70°	164.8	2.5
70°-80°	117.9	1.8
80°-90°	73.6	1.1
90°-100°	105.1	1.6
100°-110°	327.6	4.9
110°-120°	745.0	11.2
120°-130°	930.7	13.9
130°-140°	986.6	14.8
140°-150°	918.5	13.7
150°-160°	740.0	11.1
160°-170°	477.5	7.1
170°-180°	164.6	2.5
0°-30°	320.4	4.8
0°-40°	521.4	7.8
0°-60°	929.0	13.9
0°-90°	1285.3	19.2
90°-120°	1177.8	17.6
90°-150°	4013.6	60.1
90°-180°	5396.0	80.8
0°-180°	6681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	417	416	413	417	416	40
15°	397	398	398	402	402	112
25°	358	363	364	370	370	165
35°	308	316	322	328	330	193
45°	252	263	274	283	287	194
55°	192	207	224	236	239	172
65°	133	150	170	184	189	131
75°	72	93	116	131	136	77
85°	22	45	69	84	89	23
90°	7	42	82	103	110	9
95°	84	48	85	108	112	98
105°	387	412	316	101	107	410
115°	721	734	762	786	795	713
125°	1015	1025	1044	1056	1062	907
135°	1263	1270	1280	1292	1291	972
145°	1457	1465	1468	1474	1476	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.3	416.3	416.3	416.3	416.3
2.5°	418.5	417.2	413.6	417.2	416.7
5°	416.7	415.8	413.1	416.7	416.3
7.5°	413.6	413.6	410.8	415.4	414.9
10°	409.0	409.9	407.7	412.2	411.3
12.5°	403.6	404.9	403.6	407.7	406.7
15°	396.8	398.1	397.7	402.2	401.8
17.5°	388.6	391.3	390.9	395.0	394.1
20°	379.5	382.3	383.2	387.3	387.7
22.5°	370.0	372.7	374.1	379.5	379.1
25°	358.2	362.8	364.1	370.0	370.0
27.5°	346.9	351.9	354.6	359.6	360.0
30°	334.7	340.5	344.2	349.6	349.6
32.5°	321.0	327.8	332.8	338.7	340.1
35°	308.3	315.6	321.5	328.3	330.1
37.5°	294.7	302.9	309.7	317.4	318.8
40°	281.1	289.3	298.4	306.1	307.9
42.5°	266.2	276.6	286.1	294.7	297.5
45°	252.1	263.0	274.3	283.0	286.6
47.5°	237.2	249.4	262.1	271.6	274.3
50°	222.6	235.3	249.4	259.8	263.0
52.5°	207.2	220.8	236.7	247.6	251.7
55°	192.3	207.2	223.6	235.8	239.4
57.5°	177.8	193.2	210.9	223.1	227.2
60°	162.3	178.7	197.3	209.9	214.9
62.5°	147.8	164.6	184.6	197.3	201.8
65°	132.9	150.5	170.5	184.1	188.6
67.5°	117.9	136.5	156.4	171.4	175.0
70°	102.0	121.5	143.3	157.8	162.3
72.5°	87.5	107.0	129.7	144.7	149.2
75°	72.1	93.4	116.1	131.0	136.5
77.5°	58.9	80.3	102.9	118.8	122.9
80°	44.9	67.1	90.7	106.1	110.6
82.5°	32.6	55.3	79.4	94.8	99.3
85°	22.2	44.9	68.9	84.3	88.9
87.5°	13.6	36.3	59.4	74.8	79.4
90°	7.2	42.3	82.1	102.7	109.8
92.5°	35.0	46.8	81.0	105.1	110.4
95°	83.5	48.4	84.8	107.8	112.4
97.5°	147.3	127.7	83.4	107.3	113.0
100°	221.5	261.7	82.0	105.3	111.1
102.5°	305.9	335.3	131.9	102.1	109.3
105°	386.9	412.0	315.7	100.7	107.4
107.5°	472.7	493.8	531.7	345.8	181.4
110°	558.4	576.9	609.2	578.5	398.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.7	656.2	687.5	710.4	711.9
115°	721.4	734.5	762.4	786.1	794.9
117.5°	801.1	813.7	835.6	856.8	861.7
120°	874.0	887.8	906.6	927.4	930.5
122.5°	948.6	958.5	977.7	994.2	998.5
125°	1015.1	1025.4	1043.6	1055.7	1061.5
127.5°	1082.0	1091.8	1109.5	1122.4	1123.1
130°	1143.7	1153.5	1167.7	1181.5	1181.6
132.5°	1202.4	1212.7	1223.3	1236.7	1235.9
135°	1262.8	1270.2	1280.2	1292.3	1290.7
137.5°	1314.3	1324.2	1329.9	1343.6	1343.3
140°	1365.4	1373.1	1378.2	1390.2	1389.9
142.5°	1412.9	1420.2	1424.0	1433.8	1432.2
145°	1456.7	1465.2	1467.8	1473.9	1475.7
147.5°	1498.6	1505.1	1507.6	1511.6	1507.0
150°	1537.2	1541.1	1543.7	1546.2	1543.3
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)