

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: P1031567

Luminaire Tested: S123DIW-B340D1030UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031567
REPORT IS A COMBINATION OF REPORTS P991222 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

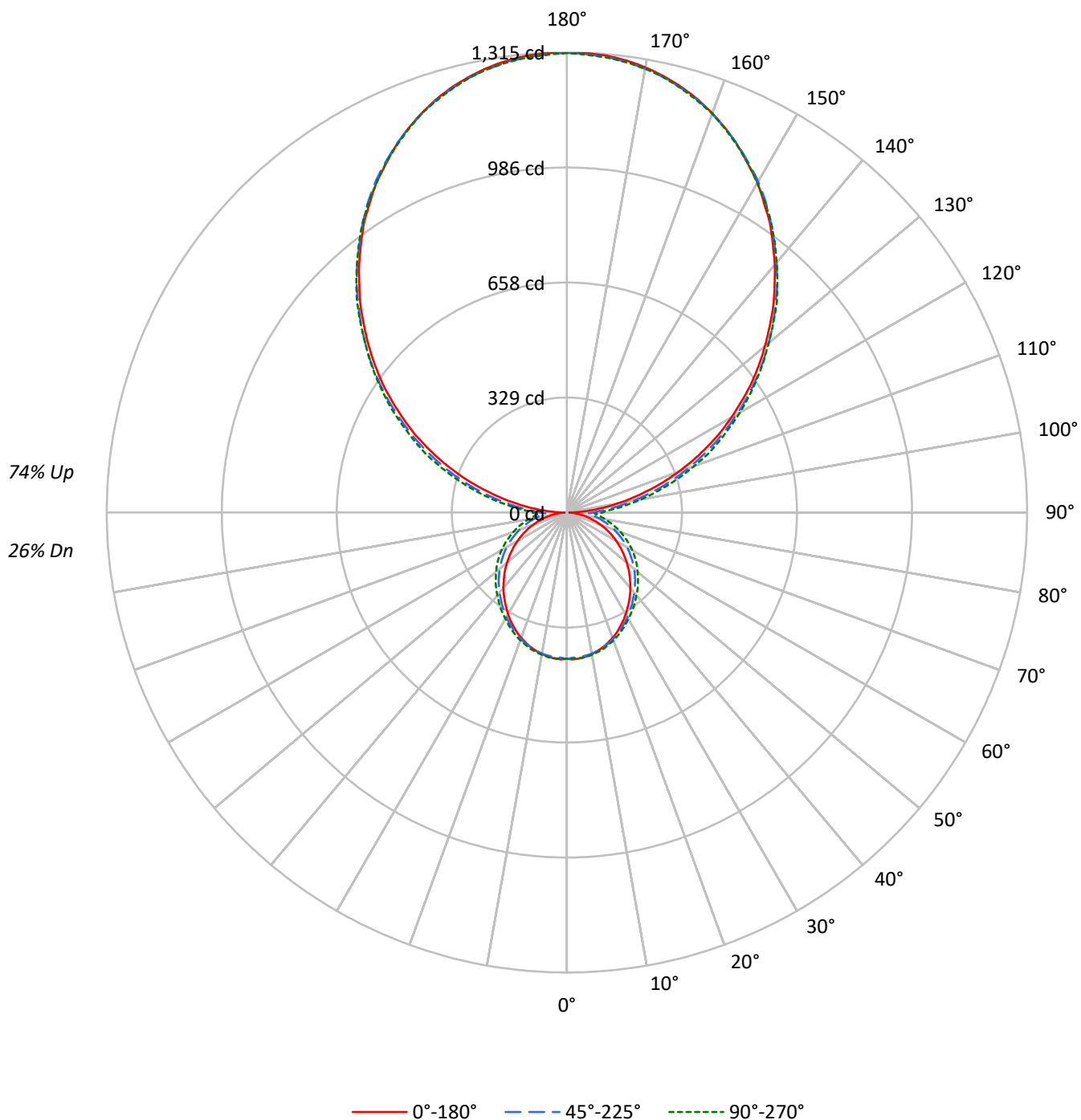
Lumens per Lamp: N/A
Luminaire Lumens: 5048.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	87	83	80	82	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	24	23
3	76	66	59	54	67	59	53	48	46	42	38	34	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	27	24	20	18	16
5	63	52	44	38	56	46	40	35	36	31	28	27	23	21	18	16	14
6	58	46	39	33	52	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	29	48	37	31	26	29	24	21	22	18	16	14	12	11
8	50	38	30	25	44	34	27	23	27	22	18	20	16	14	13	11	10
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	9
10	43	31	24	20	38	28	22	18	22	18	14	17	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4500	4500	4500
5°	4512	4368	4365
10°	4470	4250	4217
15°	4411	4119	4061
20°	4327	3973	3894
25°	4224	3809	3720
30°	4118	3660	3545
35°	4000	3505	3403
40°	3885	3363	3253
45°	3760	3225	3129
50°	3636	3089	2995
55°	3499	2948	2872
60°	3363	2805	2746
65°	3225	2652	2597
70°	3019	2481	2444
75°	2754	2286	2287
80°	2448	2088	2107
85°	2142	1927	1979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3760 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.8
10°-20°	113.1	2.2
20°-30°	169.1	3.3
30°-40°	201.9	4.0
40°-50°	211.2	4.2
50°-60°	198.2	3.9
60°-70°	165.5	3.3
70°-80°	118.4	2.3
80°-90°	73.2	1.5
90°-100°	128.8	2.6
100°-110°	288.5	5.7
110°-120°	457.5	9.1
120°-130°	585.7	11.6
130°-140°	649.9	12.9
140°-150°	634.7	12.6
150°-160°	533.4	10.6
160°-170°	355.1	7.0
170°-180°	124.3	2.5
0°-30°	321.8	6.4
0°-40°	523.6	10.4
0°-60°	933.0	18.5
0°-90°	1290.1	25.6
90°-120°	874.8	17.3
90°-150°	2745.1	54.4
90°-180°	3758.0	74.4
0°-180°	5048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	418	415	418	418	40
15°	398	400	399	404	404	112
25°	360	364	366	372	372	166
35°	310	317	323	330	332	194
45°	253	264	276	284	288	195
55°	193	208	224	237	240	173
65°	133	151	171	185	189	132
75°	72	94	117	132	137	77
85°	22	45	69	85	89	23
90°	7	40	76	96	102	9
95°	66	91	122	140	144	71
105°	236	249	278	290	297	252
115°	441	449	464	476	478	436
125°	643	646	658	663	662	574
135°	834	840	844	848	848	642
145°	1011	1012	1016	1018	1016	631
155°	1157	1157	1158	1162	1155	533
165°	1260	1257	1257	1263	1256	355
175°	1311	1306	1306	1313	1306	125
180°	1314	1314	1314	1314	1314	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.1	418.1	418.1	418.1	418.1
2.5°	420.3	419.0	415.3	419.0	418.5
5°	418.5	417.6	414.9	418.5	418.1
7.5°	415.3	415.3	412.6	417.1	416.7
10°	410.8	411.7	409.4	414.0	413.0
12.5°	405.3	406.7	405.3	409.4	408.5
15°	398.5	399.8	399.4	403.9	403.5
17.5°	390.3	393.0	392.6	396.7	395.7
20°	381.2	383.9	384.8	388.9	389.4
22.5°	371.6	374.3	375.7	381.2	380.7
25°	359.8	364.3	365.7	371.6	371.6
27.5°	348.4	353.4	356.1	361.1	361.6
30°	336.1	342.0	345.6	351.1	351.1
32.5°	322.4	329.3	334.3	340.2	341.6
35°	309.7	317.0	322.9	329.7	331.5
37.5°	296.0	304.2	311.0	318.8	320.1
40°	282.3	290.5	299.7	307.4	309.2
42.5°	267.3	277.8	287.4	296.0	298.7
45°	253.2	264.1	275.5	284.2	287.8
47.5°	238.2	250.5	263.2	272.8	275.5
50°	223.6	236.4	250.5	260.9	264.1
52.5°	208.1	221.8	237.7	248.6	252.7
55°	193.1	208.1	224.5	236.8	240.5
57.5°	178.5	194.0	211.8	224.1	228.2
60°	163.0	179.4	198.1	210.9	215.9
62.5°	148.5	165.3	185.3	198.1	202.7
65°	133.4	151.2	171.2	184.9	189.4
67.5°	118.4	137.1	157.1	172.1	175.8
70°	102.5	122.0	143.9	158.5	163.0
72.5°	87.9	107.5	130.2	145.3	149.8
75°	72.4	93.8	116.6	131.6	137.1
77.5°	59.2	80.6	103.4	119.3	123.4
80°	45.1	67.4	91.1	106.6	111.1
82.5°	32.8	55.6	79.7	95.2	99.7
85°	22.3	45.1	69.2	84.7	89.3
87.5°	13.7	36.4	59.7	75.1	79.7
90°	6.9	39.6	76.3	95.8	102.5
92.5°	36.5	62.2	91.1	109.2	111.3
95°	65.9	90.9	121.5	139.7	144.3
97.5°	104.7	126.2	153.9	172.6	176.2
100°	144.5	165.2	191.3	207.6	214.3
102.5°	190.4	206.3	234.0	249.8	253.4
105°	235.8	248.9	277.8	290.5	296.6
107.5°	289.1	299.7	322.4	337.8	340.9
110°	338.1	348.4	368.6	384.7	386.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.7	397.1	414.4	431.0	435.1
115°	440.9	449.4	463.7	475.8	478.3
117.5°	493.5	498.2	511.6	522.5	523.1
120°	541.6	550.0	559.9	569.4	570.5
122.5°	592.1	597.1	609.2	616.2	616.3
125°	643.3	646.4	657.6	662.9	662.0
127.5°	690.8	696.5	705.8	708.7	707.8
130°	738.3	746.0	752.0	756.6	752.1
132.5°	785.2	793.5	798.2	801.3	799.3
135°	833.7	839.5	843.5	847.6	847.7
137.5°	878.1	882.9	889.1	891.2	890.4
140°	924.2	929.3	931.7	937.5	932.5
142.5°	966.5	971.1	973.2	978.1	975.2
145°	1010.9	1012.4	1015.5	1018.1	1015.9
147.5°	1048.5	1052.7	1055.8	1057.2	1052.8
150°	1088.8	1090.9	1092.9	1092.9	1087.6
152.5°	1121.8	1124.9	1125.9	1128.0	1122.8
155°	1156.9	1156.9	1157.9	1162.1	1154.8
157.5°	1186.8	1185.8	1186.8	1191.0	1184.8
160°	1214.7	1212.6	1212.6	1217.8	1213.7
162.5°	1239.5	1236.4	1237.4	1242.6	1235.3
165°	1260.1	1257.0	1257.0	1263.2	1256.0
167.5°	1277.7	1273.5	1274.6	1280.7	1274.6
170°	1292.1	1288.0	1288.0	1295.2	1288.0
172.5°	1303.5	1299.3	1299.3	1305.5	1298.3
175°	1310.7	1306.5	1306.5	1312.7	1305.5
177.5°	1314.8	1310.7	1310.7	1316.9	1309.6
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)