

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: P1031569

Luminaire Tested: S123DIW-B340D1030UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031569
REPORT IS A COMBINATION OF REPORTS P991225 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

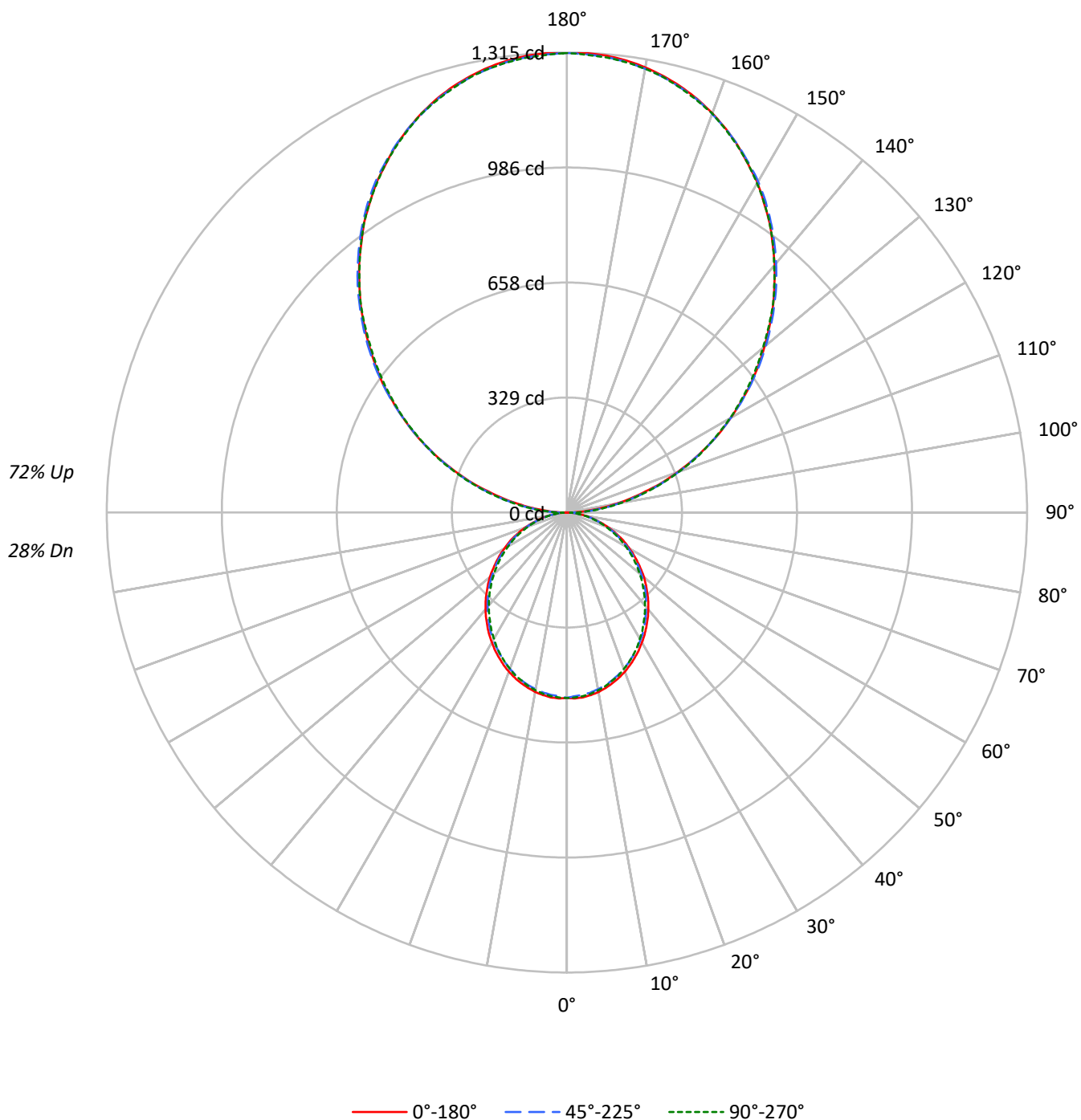
Lumens per Lamp: N/A
Luminaire Lumens: 5022.0 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35			28
1	93	89	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30			23
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25			19
3	77	68	61	55	68	61	55	50	48	44	40	36	33	31	24	23	21			16
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	18			14
5	64	53	45	40	57	48	41	36	38	33	29	28	25	22	19	18	16			12
6	59	48	40	34	53	43	36	31	34	29	25	25	22	20	18	16	14			11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	12			9
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11			8
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	14	11	10			8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	10	9			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5704	5704	5704
5°	5717	5506	5499
10°	5667	5321	5265
15°	5588	5127	5012
20°	5497	4911	4761
25°	5380	4684	4492
30°	5253	4449	4210
35°	5119	4209	3928
40°	4978	3957	3653
45°	4824	3712	3364
50°	4667	3438	3074
55°	4466	3153	2780
60°	4259	2839	2468
65°	4064	2498	2143
70°	3784	2120	1762
75°	3378	1680	1368
80°	2921	1180	967
85°	2276	635	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	1.0
10°-20°	141.0	2.8
20°-30°	208.3	4.1
30°-40°	243.3	4.8
40°-50°	244.6	4.9
50°-60°	214.8	4.3
60°-70°	160.0	3.2
70°-80°	91.1	1.8
80°-90°	28.7	0.6
90°-100°	84.6	1.7
100°-110°	256.0	5.1
110°-120°	435.8	8.7
120°-130°	573.3	11.4
130°-140°	644.4	12.8
140°-150°	633.5	12.6
150°-160°	533.3	10.6
160°-170°	355.1	7.1
170°-180°	124.3	2.5
0°-30°	399.3	8.0
0°-40°	642.6	12.8
0°-60°	1102.0	21.9
0°-90°	1381.8	27.5
90°-120°	776.3	15.5
90°-150°	2627.5	52.3
90°-180°	3640.0	72.5
0°-180°	5022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	530	528	523	528	527	50
15°	505	503	497	501	498	142
25°	458	456	450	450	449	211
35°	396	394	388	385	383	248
45°	325	323	317	312	309	251
55°	246	246	240	235	233	221
65°	168	166	161	158	156	166
75°	89	87	86	83	82	95
85°	24	23	23	22	22	25
90°	1	11	25	29	31	6
95°	61	68	76	80	80	67
105°	232	234	244	244	246	249
115°	439	442	440	441	440	434
125°	642	645	643	639	635	572
135°	833	839	838	834	832	642
145°	1010	1012	1016	1014	1010	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°	529.9	529.9	529.9	529.9	529.9
2.5°	532.1	530.3	525.3	529.9	529.4
5°	530.3	528.0	523.0	527.6	526.7
7.5°	526.2	523.9	518.9	523.0	522.6
10°	520.8	518.5	512.6	516.7	515.7
12.5°	513.5	511.6	506.2	508.9	508.5
15°	504.8	503.0	497.1	500.7	498.0
17.5°	495.2	493.0	487.0	489.8	488.9
20°	484.3	481.6	475.6	477.5	476.1
22.5°	472.0	469.3	463.3	464.7	462.9
25°	458.3	455.6	449.7	450.1	448.8
27.5°	444.2	441.5	435.1	435.6	434.2
30°	428.7	426.4	420.1	420.1	416.9
32.5°	413.2	410.0	405.5	402.3	400.9
35°	396.4	393.6	387.7	385.0	382.7
37.5°	379.5	375.9	369.9	366.8	365.4
40°	361.7	359.0	352.6	349.0	347.2
42.5°	344.0	340.8	334.4	330.8	328.9
45°	324.8	323.0	317.1	311.6	309.4
47.5°	306.2	303.4	298.0	292.5	290.7
50°	287.0	284.8	278.8	273.8	271.1
52.5°	267.0	265.6	259.2	255.1	252.4
55°	246.5	246.0	240.1	235.1	232.8
57.5°	227.3	225.5	221.0	216.4	213.7
60°	206.4	205.9	200.5	196.4	194.1
62.5°	187.7	186.3	180.9	176.8	175.4
65°	168.1	165.8	161.3	157.6	156.3
67.5°	147.2	145.3	141.7	138.5	136.7
70°	128.5	125.7	123.0	119.8	117.5
72.5°	108.9	107.1	103.9	101.1	100.2
75°	88.8	87.0	85.7	83.4	82.0
77.5°	71.1	70.2	68.3	66.5	66.5
80°	53.8	52.4	51.5	51.0	51.0
82.5°	36.9	36.9	36.9	36.0	35.5
85°	23.7	22.8	22.8	21.9	21.9
87.5°	11.8	10.5	10.0	9.6	9.6
90°	1.0	11.4	24.8	28.9	31.0
92.5°	31.0	37.2	43.3	46.4	44.4
95°	60.9	68.1	76.4	80.5	80.5
97.5°	100.1	105.3	111.5	116.6	115.6
100°	140.4	146.5	151.7	154.8	156.9
102.5°	186.8	189.9	197.1	200.2	199.2
105°	232.2	234.3	243.6	243.6	245.6
107.5°	285.9	286.9	291.0	294.1	293.1
110°	335.4	337.5	339.5	343.7	341.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.0	388.0	388.0	393.2	393.2
115°	438.6	441.7	439.6	440.7	439.6
117.5°	491.2	492.3	490.2	490.2	487.1
120°	539.8	545.9	540.8	539.8	537.7
122.5°	590.3	594.4	592.4	589.3	586.2
125°	641.9	645.0	643.0	638.8	634.7
127.5°	689.4	695.6	693.5	687.3	683.2
130°	736.9	745.1	742.0	737.9	730.7
132.5°	784.3	792.6	790.5	785.4	780.2
135°	832.8	839.0	838.0	833.9	831.8
137.5°	877.2	882.4	885.5	880.3	877.2
140°	923.7	928.8	929.9	928.8	921.6
142.5°	966.0	971.1	973.2	972.2	967.0
145°	1010.4	1012.4	1015.5	1014.5	1010.4
147.5°	1048.5	1052.7	1055.8	1055.8	1049.6
150°	1088.8	1090.9	1092.9	1092.9	1086.7
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)