

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: P1031555

Luminaire Tested: S123DIW-B340D1030UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031555
REPORT IS A COMBINATION OF REPORTS P991183 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

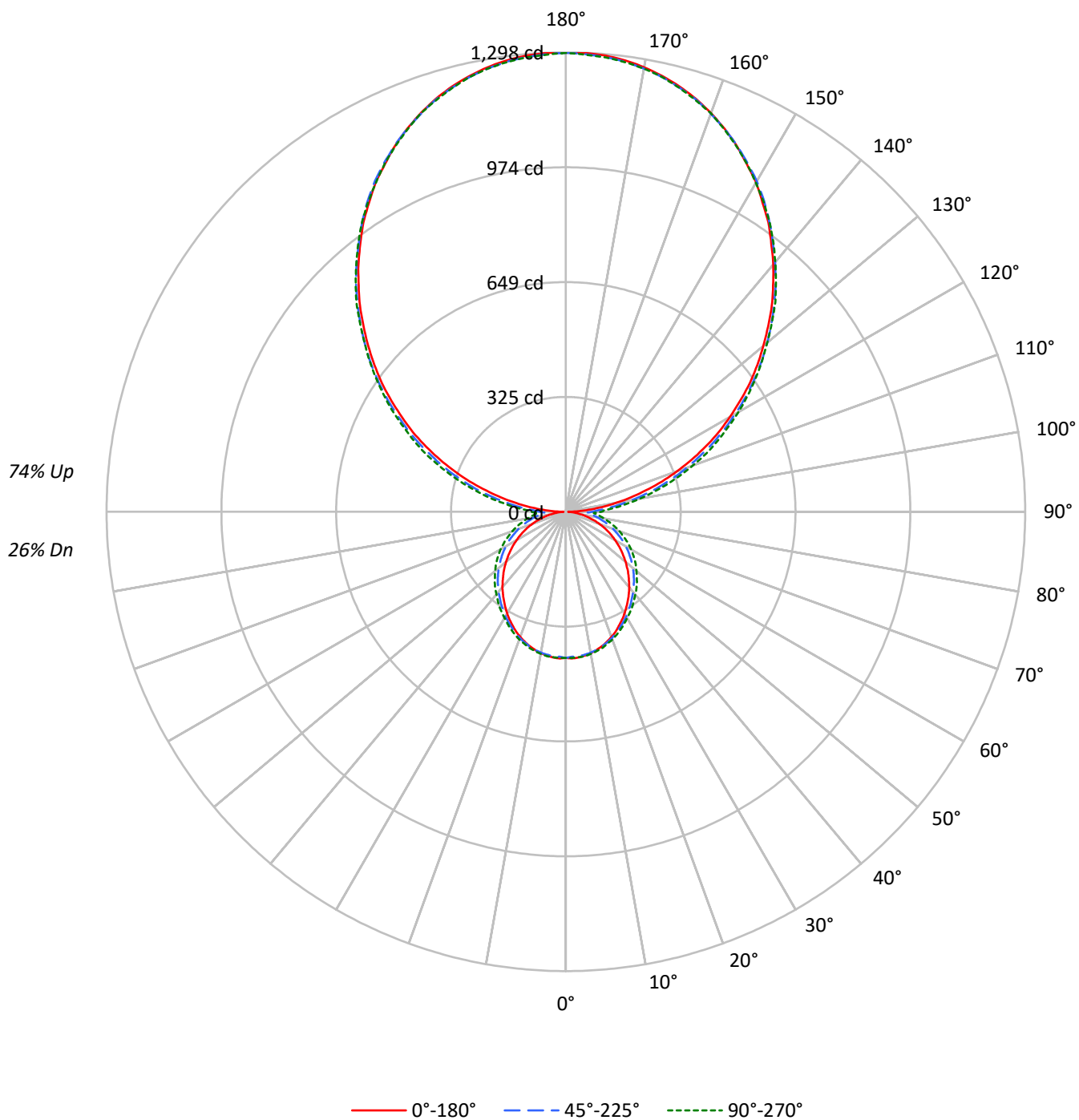
Lumens per Lamp: N/A
Luminaire Lumens: 4982.9 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	4442	4442	4442
5°	4455	4312	4308
10°	4413	4196	4164
15°	4355	4066	4009
20°	4272	3923	3844
25°	4170	3760	3672
30°	4065	3614	3500
35°	3948	3460	3360
40°	3836	3319	3212
45°	3713	3184	3089
50°	3589	3049	2956
55°	3454	2910	2835
60°	3320	2769	2710
65°	3184	2617	2564
70°	2980	2450	2412
75°	2720	2256	2257
80°	2416	2061	2080
85°	2113	1902	1953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3713 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.8
10°-20°	111.6	2.2
20°-30°	166.9	3.3
30°-40°	199.3	4.0
40°-50°	208.5	4.2
50°-60°	195.6	3.9
60°-70°	163.4	3.3
70°-80°	116.9	2.3
80°-90°	72.3	1.5
90°-100°	127.2	2.6
100°-110°	284.8	5.7
110°-120°	451.6	9.1
120°-130°	578.1	11.6
130°-140°	641.5	12.9
140°-150°	626.5	12.6
150°-160°	526.5	10.6
160°-170°	350.5	7.0
170°-180°	122.7	2.5
0°-30°	317.7	6.4
0°-40°	516.9	10.4
0°-60°	921.1	18.5
0°-90°	1273.6	25.6
90°-120°	863.5	17.3
90°-150°	2709.6	54.4
90°-180°	3709.0	74.4
0°-180°	4982.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	413	412	410	413	413	39
15°	393	395	394	399	398	111
25°	355	360	361	367	367	164
35°	306	313	319	326	327	191
45°	250	261	272	280	284	193
55°	191	206	222	234	237	171
65°	132	149	169	182	187	130
75°	72	93	115	130	135	76
85°	22	44	68	84	88	23
90°	7	39	75	95	101	9
95°	65	90	120	138	142	70
105°	233	246	274	287	293	249
115°	435	444	458	470	472	431
125°	635	638	649	654	654	566
135°	823	829	833	837	837	634
145°	998	999	1002	1005	1003	623
155°	1142	1142	1143	1147	1140	526
165°	1244	1241	1241	1247	1240	351
175°	1294	1290	1290	1296	1289	123
180°	1297	1297	1297	1297	1297	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.7	412.7	412.7	412.7	412.7
2.5°	414.9	413.6	410.0	413.6	413.2
5°	413.2	412.3	409.6	413.2	412.7
7.5°	410.0	410.0	407.3	411.8	411.4
10°	405.5	406.4	404.2	408.7	407.8
12.5°	400.1	401.5	400.1	404.2	403.3
15°	393.4	394.7	394.3	398.8	398.3
17.5°	385.3	388.0	387.5	391.6	390.7
20°	376.3	379.0	379.9	383.9	384.4
22.5°	366.8	369.5	370.9	376.3	375.8
25°	355.2	359.7	361.0	366.8	366.8
27.5°	343.9	348.9	351.6	356.5	357.0
30°	331.8	337.6	341.2	346.6	346.6
32.5°	318.3	325.0	330.0	335.8	337.2
35°	305.7	312.9	318.7	325.5	327.3
37.5°	292.2	300.3	307.1	314.7	316.0
40°	278.7	286.8	295.8	303.5	305.3
42.5°	263.9	274.2	283.7	292.2	294.9
45°	250.0	260.7	272.0	280.5	284.1
47.5°	235.1	247.3	259.8	269.3	272.0
50°	220.7	233.3	247.3	257.6	260.7
52.5°	205.5	218.9	234.7	245.5	249.5
55°	190.6	205.5	221.6	233.8	237.4
57.5°	176.2	191.5	209.0	221.2	225.2
60°	160.9	177.1	195.6	208.1	213.1
62.5°	146.6	163.2	183.0	195.6	200.1
65°	131.7	149.3	169.0	182.5	187.0
67.5°	116.9	135.3	155.1	169.9	173.5
70°	101.2	120.5	142.1	156.4	160.9
72.5°	86.8	106.1	128.6	143.4	147.9
75°	71.5	92.6	115.1	129.9	135.3
77.5°	58.4	79.6	102.1	117.8	121.8
80°	44.5	66.5	89.9	105.2	109.7
82.5°	32.4	54.8	78.7	94.0	98.5
85°	22.0	44.5	68.3	83.6	88.1
87.5°	13.5	36.0	58.9	74.2	78.7
90°	6.8	39.1	75.2	94.6	101.2
92.5°	36.0	61.4	90.0	107.8	109.9
95°	65.0	89.7	119.9	137.9	142.4
97.5°	103.3	124.6	151.8	170.4	173.9
100°	142.5	163.1	188.9	204.9	211.4
102.5°	188.0	203.6	231.0	246.6	250.1
105°	232.8	245.6	274.1	286.7	292.9
107.5°	285.3	295.8	318.3	333.5	336.5
110°	333.8	343.9	364.0	379.7	381.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.7	392.0	409.1	425.4	429.5
115°	435.2	443.6	457.8	469.6	472.2
117.5°	487.1	491.7	505.0	515.8	516.3
120°	534.6	542.9	552.7	562.0	563.1
122.5°	584.5	589.5	601.3	608.2	608.3
125°	634.9	638.0	649.1	654.4	653.5
127.5°	681.8	687.5	696.7	699.6	698.7
130°	728.7	736.4	742.4	746.8	742.3
132.5°	775.1	783.3	787.9	790.9	789.0
135°	823.0	828.6	832.6	836.6	836.8
137.5°	866.8	871.4	877.7	879.8	878.9
140°	912.1	917.2	919.7	925.3	920.5
142.5°	953.9	958.6	960.6	965.4	962.6
145°	997.7	999.4	1002.4	1005.0	1002.7
147.5°	1035.0	1039.1	1042.1	1043.4	1039.1
150°	1074.7	1076.8	1078.8	1078.8	1073.6
152.5°	1107.3	1110.4	1111.4	1113.5	1108.4
155°	1142.0	1142.0	1143.0	1147.1	1139.9
157.5°	1171.5	1170.5	1171.5	1175.6	1169.5
160°	1199.0	1197.0	1197.0	1202.1	1198.0
162.5°	1223.5	1220.4	1221.4	1226.5	1219.4
165°	1243.8	1240.8	1240.8	1246.9	1239.8
167.5°	1261.2	1257.1	1258.1	1264.2	1258.1
170°	1275.4	1271.4	1271.4	1278.5	1271.4
172.5°	1286.6	1282.6	1282.6	1288.7	1281.5
175°	1293.8	1289.7	1289.7	1295.8	1288.7
177.5°	1297.8	1293.8	1293.8	1299.9	1292.7
180°	1296.8	1296.8	1296.8	1296.8	1296.8

(END OF REPORT)