

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: P1031554

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031554
REPORT IS A COMBINATION OF REPORTS P991182 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

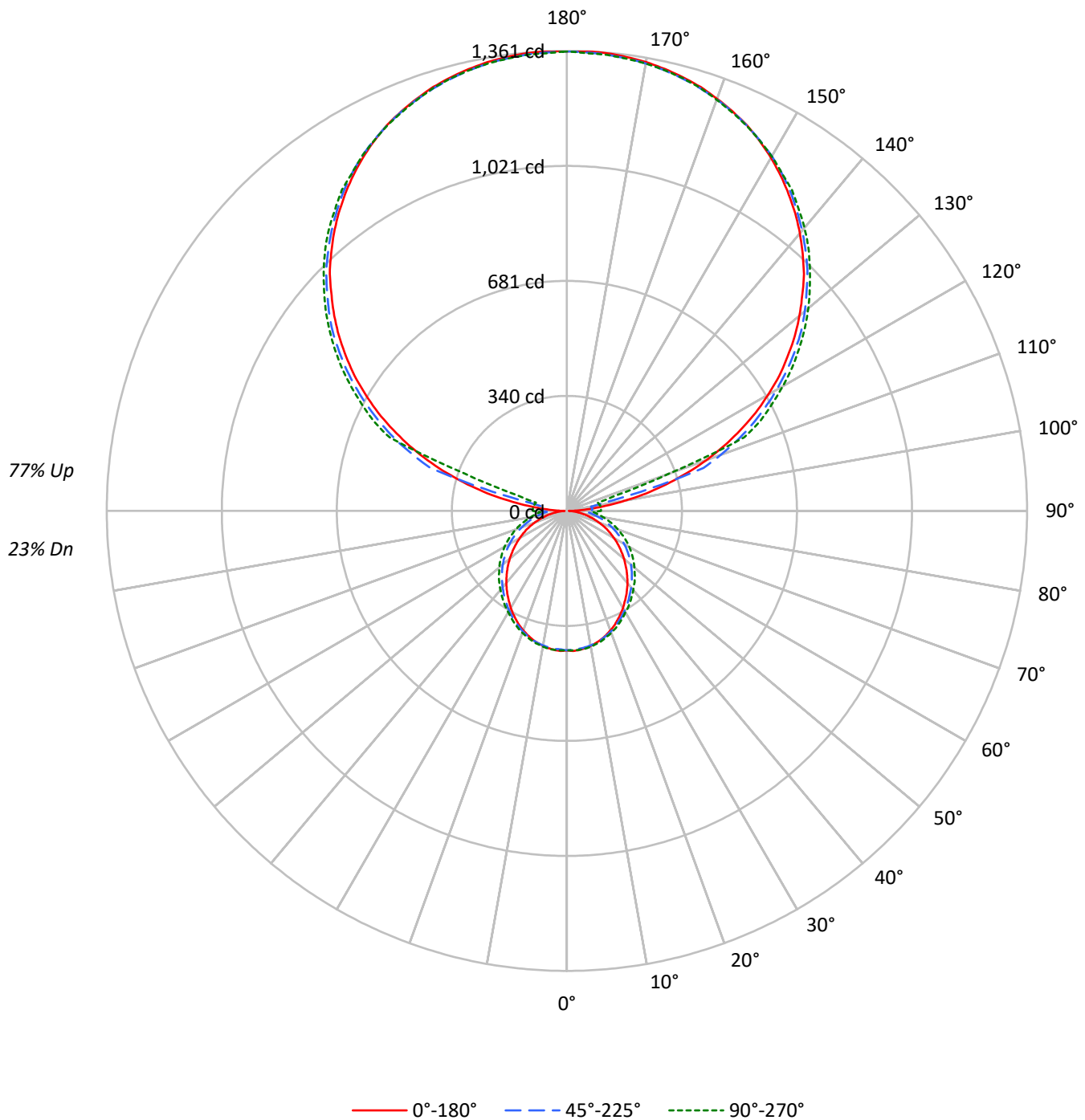
Lumens per Lamp: N/A
Luminaire Lumens: 5533.9 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (A_{in}): 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	89	89	89	89	68	68	68	49	49	49	31	31	31
1	91	87	83	79	81	77	74	71	59	57	55	42	41	40	27	26	25
2	83	76	69	64	73	67	62	58	51	48	45	37	35	33	23	22	21
3	75	66	59	53	67	59	53	48	45	41	37	32	30	27	21	19	18
4	69	58	51	45	61	52	45	40	40	35	32	29	26	23	18	16	15
5	63	52	44	38	56	46	39	34	35	31	27	26	22	20	16	14	13
6	58	46	38	33	51	41	34	30	32	27	23	23	20	17	15	13	11
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	13	11	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	10	9	7

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	0.7
10°-20°	111.6	2.0
20°-30°	166.9	3.0
30°-40°	199.3	3.6
40°-50°	208.5	3.8
50°-60°	195.6	3.5
60°-70°	163.4	3.0
70°-80°	116.9	2.1
80°-90°	72.2	1.3
90°-100°	91.6	1.7
100°-110°	263.9	4.8
110°-120°	589.4	10.7
120°-130°	733.2	13.2
130°-140°	775.7	14.0
140°-150°	721.4	13.0
150°-160°	581.0	10.5
160°-170°	374.9	6.8
170°-180°	129.2	2.3
0°-30°	317.7	5.7
0°-40°	516.9	9.3
0°-60°	921.1	16.6
0°-90°	1273.6	23.0
90°-120°	944.9	17.1
90°-150°	3175.3	57.4
90°-180°	4260.0	77.0
0°-180°	5533.9	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	94	101	8
95°	66	43	76	97	101	77
105°	305	326	255	89	95	323
115°	567	578	604	624	632	560
125°	797	805	822	834	839	712
135°	992	997	1006	1017	1017	764
145°	1144	1150	1152	1158	1160	716
155°	1259	1257	1258	1264	1257	580
165°	1328	1325	1324	1332	1325	375
175°	1359	1354	1355	1362	1354	129
180°	1359	1359	1359	1359	1359	

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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	39.0	75.0	94.4	100.9
92.5°	28.6	41.9	73.5	95.3	100.4
95°	66.5	42.7	75.8	96.8	101.3
97.5°	116.6	104.5	74.1	95.7	101.2
100°	174.7	209.3	72.4	93.5	99.0
102.5°	240.9	266.7	111.1	90.4	96.9
105°	304.6	326.5	254.9	88.7	94.8
107.5°	371.7	390.3	423.9	280.5	152.2
110°	439.0	455.2	484.3	462.7	321.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	517.0	545.2	565.5	567.6
115°	566.8	578.2	603.5	624.4	632.1
117.5°	629.4	640.1	660.4	679.3	683.9
120°	686.6	697.8	715.8	734.2	737.4
122.5°	745.1	753.1	771.0	786.0	790.2
125°	797.2	805.2	822.4	833.8	839.0
127.5°	849.7	857.4	873.6	885.6	886.8
130°	898.1	905.8	918.9	931.4	932.1
132.5°	944.2	952.3	962.0	974.2	974.3
135°	991.7	997.2	1006.3	1017.4	1016.6
137.5°	1032.1	1039.7	1044.9	1057.1	1057.3
140°	1072.0	1078.0	1082.5	1093.2	1093.5
142.5°	1109.3	1115.0	1118.0	1126.9	1126.1
145°	1143.7	1150.4	1152.4	1158.0	1159.8
147.5°	1176.6	1181.7	1183.7	1187.0	1183.7
150°	1206.9	1209.9	1212.0	1214.0	1211.8
152.5°	1234.2	1235.2	1236.2	1240.2	1235.2
155°	1259.4	1257.4	1258.4	1263.5	1257.4
157.5°	1279.6	1279.6	1278.6	1284.7	1276.6
160°	1297.8	1296.8	1295.8	1301.8	1294.8
162.5°	1315.0	1311.9	1310.9	1318.0	1311.9
165°	1328.1	1325.1	1324.1	1332.1	1325.1
167.5°	1339.2	1335.2	1335.2	1343.3	1335.2
170°	1348.3	1344.3	1344.3	1352.3	1344.3
172.5°	1354.4	1349.3	1350.3	1358.4	1349.3
175°	1359.4	1354.4	1355.4	1362.4	1354.4
177.5°	1361.4	1356.4	1357.4	1365.5	1355.4
180°	1359.4	1359.4	1359.4	1359.4	1359.4

(END OF REPORT)