

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: P1031700

Luminaire Tested: S123DIW-B560D1030UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031700
REPORT IS A COMBINATION OF REPORTS P991515 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

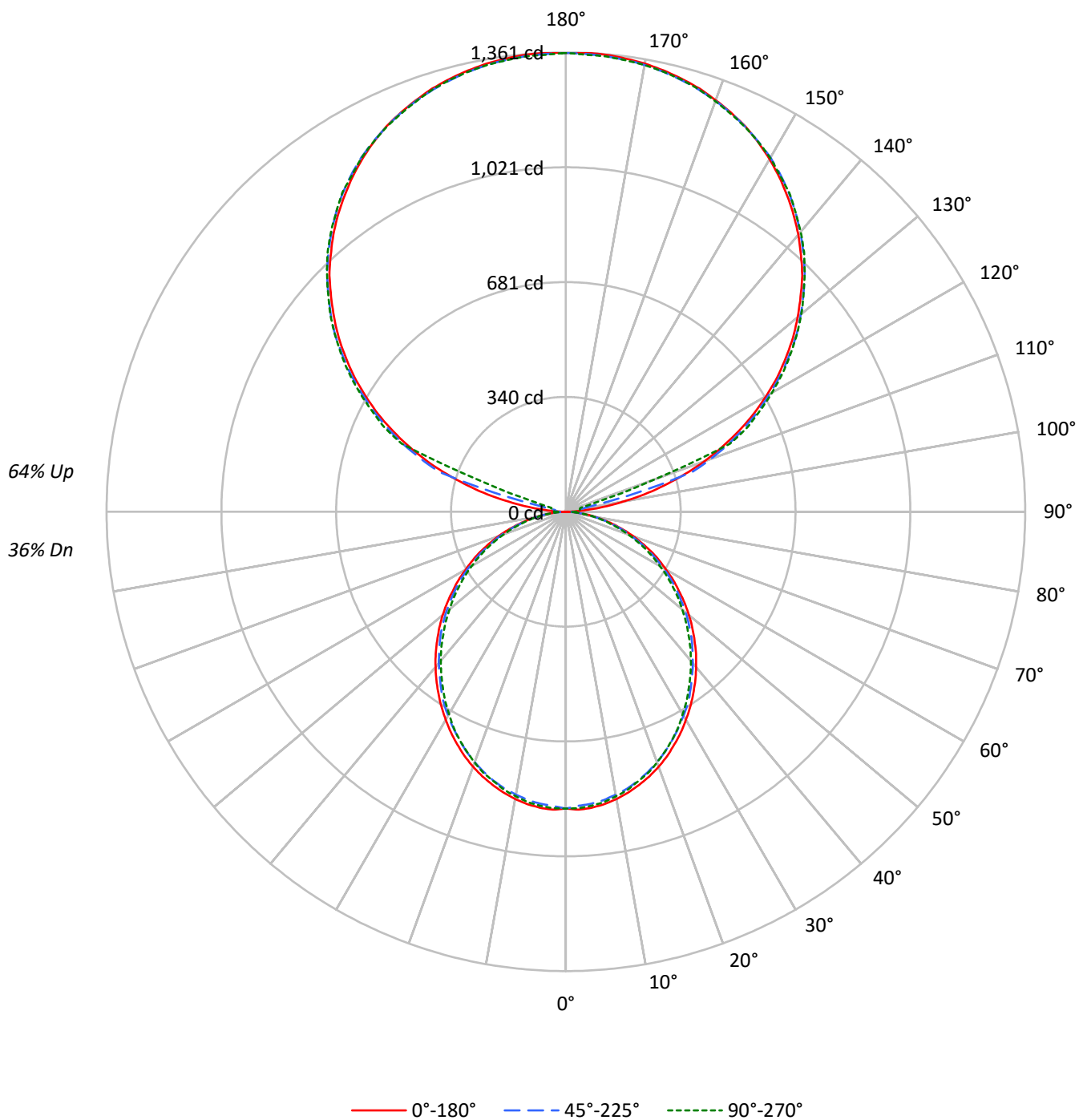
Lumens per Lamp: N/A
Luminaire Lumens: 6436.0 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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

TEST NUMBER: P1031700

CATALOG NUMBER: S123DIW-B560D1030UB27-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1031700

CATALOG NUMBER: S123DIW-B560D1030UB27-4F0-XX-W2A-F

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43
1	95	90	86	83	85	82	79	76	66	64	62	51	50	48	38	37	36
2	86	79	73	68	78	71	66	62	58	54	51	45	43	40	33	32	30
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	27	26
4	72	61	53	48	65	56	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	32	28	25	24	21	19
6	60	49	41	35	54	44	37	32	36	31	27	29	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	20	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	17	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9467	9467	9467
5°	9491	9141	9126
10°	9406	8831	8741
15°	9275	8509	8320
20°	9125	8152	7902
25°	8932	7775	7456
30°	8719	7385	6987
35°	8496	6987	6521
40°	8264	6568	6063
45°	8008	6161	5583
50°	7747	5706	5103
55°	7413	5233	4615
60°	7069	4712	4097
65°	6747	4146	3556
70°	6281	3520	2925
75°	5611	2788	2271
80°	4843	1960	1606
85°	3775	1053	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8008 cd/sqm

TEST NUMBER: P1031700

CATALOG NUMBER: S123DIW-B560D1030UB27-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.3
10°-20°	234.1	3.6
20°-30°	345.8	5.4
30°-40°	403.8	6.3
40°-50°	406.0	6.3
50°-60°	356.6	5.5
60°-70°	265.6	4.1
70°-80°	151.1	2.3
80°-90°	45.7	0.7
90°-100°	47.9	0.7
100°-110°	231.8	3.6
110°-120°	568.0	8.8
120°-130°	721.0	11.2
130°-140°	770.3	12.0
140°-150°	720.3	11.2
150°-160°	581.0	9.0
160°-170°	374.9	5.8
170°-180°	129.2	2.0
0°-30°	662.8	10.3
0°-40°	1066.7	16.6
0°-60°	1829.3	28.4
0°-90°	2291.7	35.6
90°-120°	847.7	13.2
90°-150°	3059.2	47.5
90°-180°	4144.0	64.4
0°-180°	6436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	880	876	868	876	874	83
15°	838	835	825	831	827	236
25°	761	756	746	747	745	350
35°	658	653	644	639	635	412
45°	539	536	526	517	514	416
55°	409	408	398	390	386	367
65°	279	275	268	262	259	275
75°	148	144	142	138	136	158
85°	39	38	38	36	36	42
90°	1	11	24	28	30	6
95°	62	20	31	38	38	74
105°	301	312	221	42	44	319
115°	565	571	580	590	594	558
125°	796	804	808	810	812	711
135°	991	997	1001	1004	1001	763
145°	1143	1150	1152	1154	1154	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	

TEST NUMBER: P1031700

CATALOG NUMBER: S123DIW-B560D1030UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.5	879.5	879.5	879.5	879.5
2.5°	883.3	880.3	872.0	879.5	878.8
5°	880.3	876.5	868.2	875.7	874.2
7.5°	873.5	869.7	861.4	868.2	867.4
10°	864.4	860.6	850.8	857.6	856.1
12.5°	852.3	849.3	840.2	844.7	844.0
15°	837.9	834.9	825.1	831.1	826.6
17.5°	822.0	818.3	808.4	813.0	811.5
20°	803.9	799.4	789.5	792.6	790.3
22.5°	783.5	778.9	769.1	771.4	768.4
25°	760.8	756.3	746.4	747.2	744.9
27.5°	737.3	732.8	722.2	723.0	720.7
30°	711.6	707.9	697.3	697.3	692.0
32.5°	685.9	680.6	673.1	667.8	665.5
35°	657.9	653.4	643.6	639.0	635.3
37.5°	630.0	623.9	614.1	608.8	606.5
40°	600.5	595.9	585.3	579.3	576.3
42.5°	571.0	565.7	555.1	549.0	546.0
45°	539.2	536.2	526.4	517.3	513.5
47.5°	508.2	503.7	494.6	485.5	482.5
50°	476.4	472.7	462.8	454.5	450.0
52.5°	443.2	440.9	430.3	423.5	419.0
55°	409.1	408.4	398.5	390.2	386.4
57.5°	377.4	374.3	366.8	359.2	354.7
60°	342.6	341.8	332.8	325.9	322.2
62.5°	311.6	309.3	300.2	293.4	291.2
65°	279.1	275.3	267.7	261.7	259.4
67.5°	244.3	241.2	235.2	229.9	226.9
70°	213.3	208.7	204.2	198.9	195.1
72.5°	180.7	177.7	172.4	167.9	166.4
75°	147.5	144.4	142.2	138.4	136.1
77.5°	118.0	116.5	113.4	110.4	110.4
80°	89.2	87.0	85.5	84.7	84.7
82.5°	61.3	61.3	61.3	59.7	59.0
85°	39.3	37.8	37.8	36.3	36.3
87.5°	19.7	17.4	16.6	15.9	15.9
90°	1.0	11.1	24.2	28.3	30.3
92.5°	23.2	17.2	26.3	33.3	34.3
95°	61.6	20.2	31.3	38.4	38.4
97.5°	112.1	83.8	32.3	40.4	41.4
100°	170.7	190.9	33.3	41.4	42.4
102.5°	237.3	250.5	74.7	41.4	43.4
105°	301.0	312.1	221.2	42.4	44.4
107.5°	368.6	377.7	392.9	237.3	105.0
110°	436.3	444.4	455.5	422.2	277.7

TEST NUMBER: P1031700

CATALOG NUMBER: S123DIW-B560D1030UB27-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.9	508.0	519.1	528.2	526.2
115°	564.6	570.6	579.7	589.8	593.9
117.5°	627.2	634.3	639.3	647.4	648.4
120°	684.8	693.8	696.9	705.0	705.0
122.5°	743.3	750.4	754.4	759.5	760.5
125°	795.9	803.9	808.0	810.0	812.0
127.5°	848.4	856.5	861.5	864.5	862.5
130°	896.8	904.9	909.0	913.0	911.0
132.5°	943.3	951.4	954.4	958.5	955.4
135°	990.8	996.8	1000.9	1003.9	1000.9
137.5°	1031.2	1039.3	1041.3	1046.3	1044.3
140°	1071.6	1077.6	1080.7	1084.7	1082.7
142.5°	1108.9	1115.0	1118.0	1121.1	1118.0
145°	1143.3	1150.4	1152.4	1154.4	1154.4
147.5°	1176.6	1181.7	1183.7	1185.7	1180.6
150°	1206.9	1209.9	1212.0	1214.0	1210.9
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)