

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: P1031701

Luminaire Tested: S123DIW-B560D1030UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031701
REPORT IS A COMBINATION OF REPORTS P991516 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

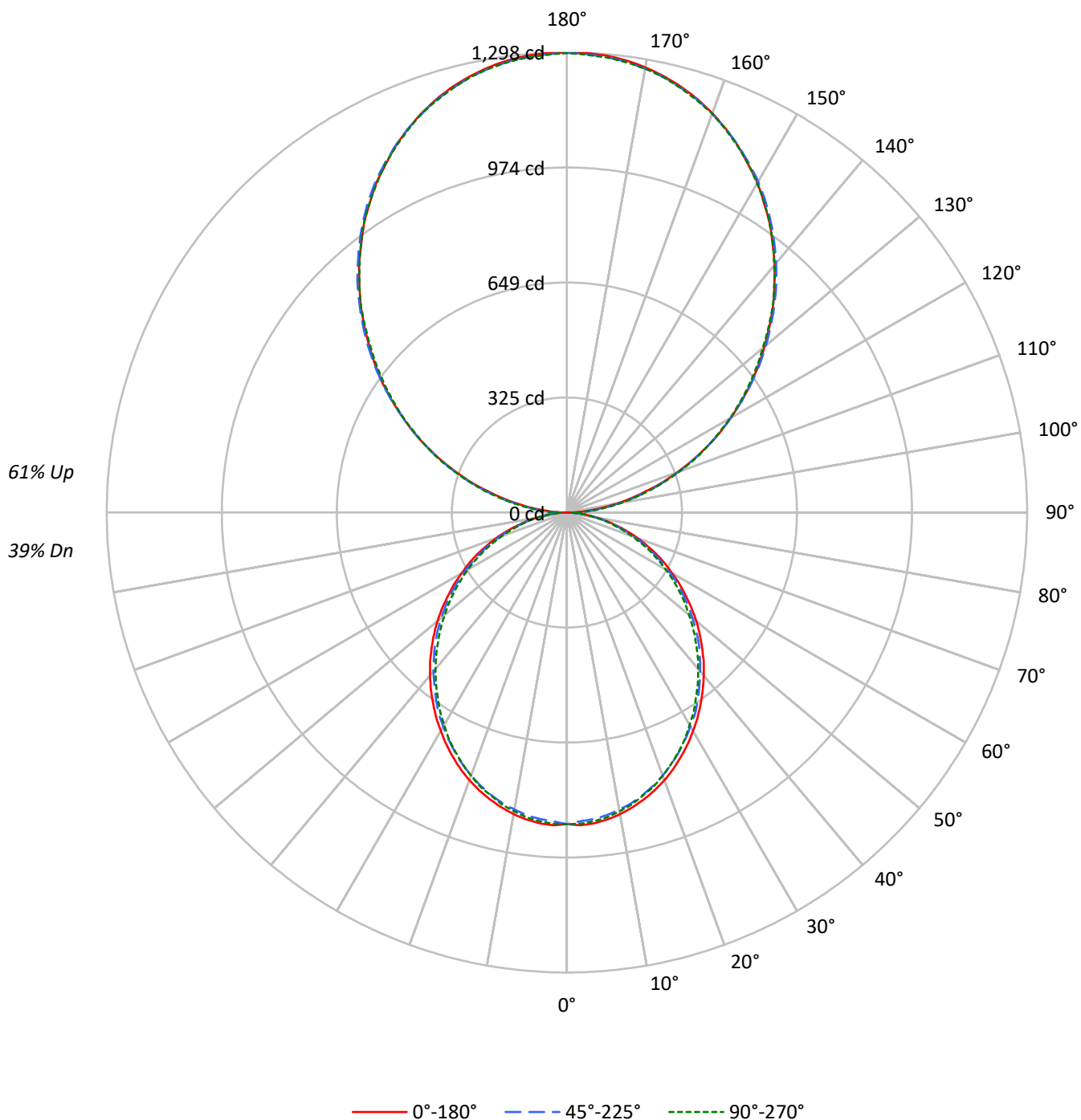
Lumens per Lamp: N/A
Luminaire Lumens: 5885.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	41	40	39
2	87	79	73	68	79	72	67	63	59	55	52	47	44	42	36	34	33
3	79	70	63	57	72	64	57	52	52	48	44	41	38	36	32	29	28
4	72	62	54	48	65	56	50	44	46	41	37	37	33	30	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	16	14	12

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.4
10°-20°	234.1	4.0
20°-30°	345.8	5.9
30°-40°	403.8	6.9
40°-50°	406.0	6.9
50°-60°	356.6	6.1
60°-70°	265.6	4.5
70°-80°	151.1	2.6
80°-90°	45.7	0.8
90°-100°	83.5	1.4
100°-110°	252.7	4.3
110°-120°	430.1	7.3
120°-130°	565.9	9.6
130°-140°	636.1	10.8
140°-150°	625.3	10.6
150°-160°	526.5	8.9
160°-170°	350.5	6.0
170°-180°	122.7	2.1
0°-30°	662.8	11.3
0°-40°	1066.7	18.1
0°-60°	1829.3	31.1
0°-90°	2291.8	38.9
90°-120°	766.3	13.0
90°-150°	2593.6	44.1
90°-180°	3593.0	61.1
0°-180°	5885.0	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	31	7
95°	60	67	75	80	80	66
105°	229	231	240	240	242	245
115°	433	436	434	435	434	428
125°	634	637	635	631	626	565
135°	822	828	827	823	821	633
145°	997	999	1002	1001	997	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°	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	11.2	24.4	28.5	30.6
92.5°	30.6	36.7	42.8	45.8	43.8
95°	60.1	67.2	75.4	79.5	79.5
97.5°	98.8	103.9	110.0	115.1	114.1
100°	138.5	144.7	149.8	152.8	154.8
102.5°	184.4	187.4	194.6	197.6	196.6
105°	229.2	231.2	240.4	240.4	242.5
107.5°	282.2	283.2	287.3	290.3	289.3
110°	331.1	333.1	335.2	339.2	337.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.0	383.0	383.0	388.1	388.1
115°	433.0	436.0	434.0	435.0	434.0
117.5°	484.9	485.9	483.9	483.9	480.8
120°	532.8	538.9	533.8	532.8	530.7
122.5°	582.7	586.8	584.7	581.7	578.6
125°	633.6	636.7	634.7	630.6	626.5
127.5°	680.5	686.6	684.6	678.5	674.4
130°	727.4	735.5	732.5	728.4	721.2
132.5°	774.2	782.4	780.3	775.2	770.1
135°	822.1	828.2	827.2	823.1	821.1
137.5°	865.9	871.0	874.1	869.0	865.9
140°	911.7	916.8	917.9	916.8	909.7
142.5°	953.5	958.6	960.6	959.6	954.5
145°	997.3	999.4	1002.4	1001.4	997.3
147.5°	1035.0	1039.1	1042.1	1042.1	1036.0
150°	1074.7	1076.8	1078.8	1078.8	1072.7
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)