

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: P1031704

Luminaire Tested: S123DIW-B560D1030UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031704
REPORT IS A COMBINATION OF REPORTS P991542 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB30-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

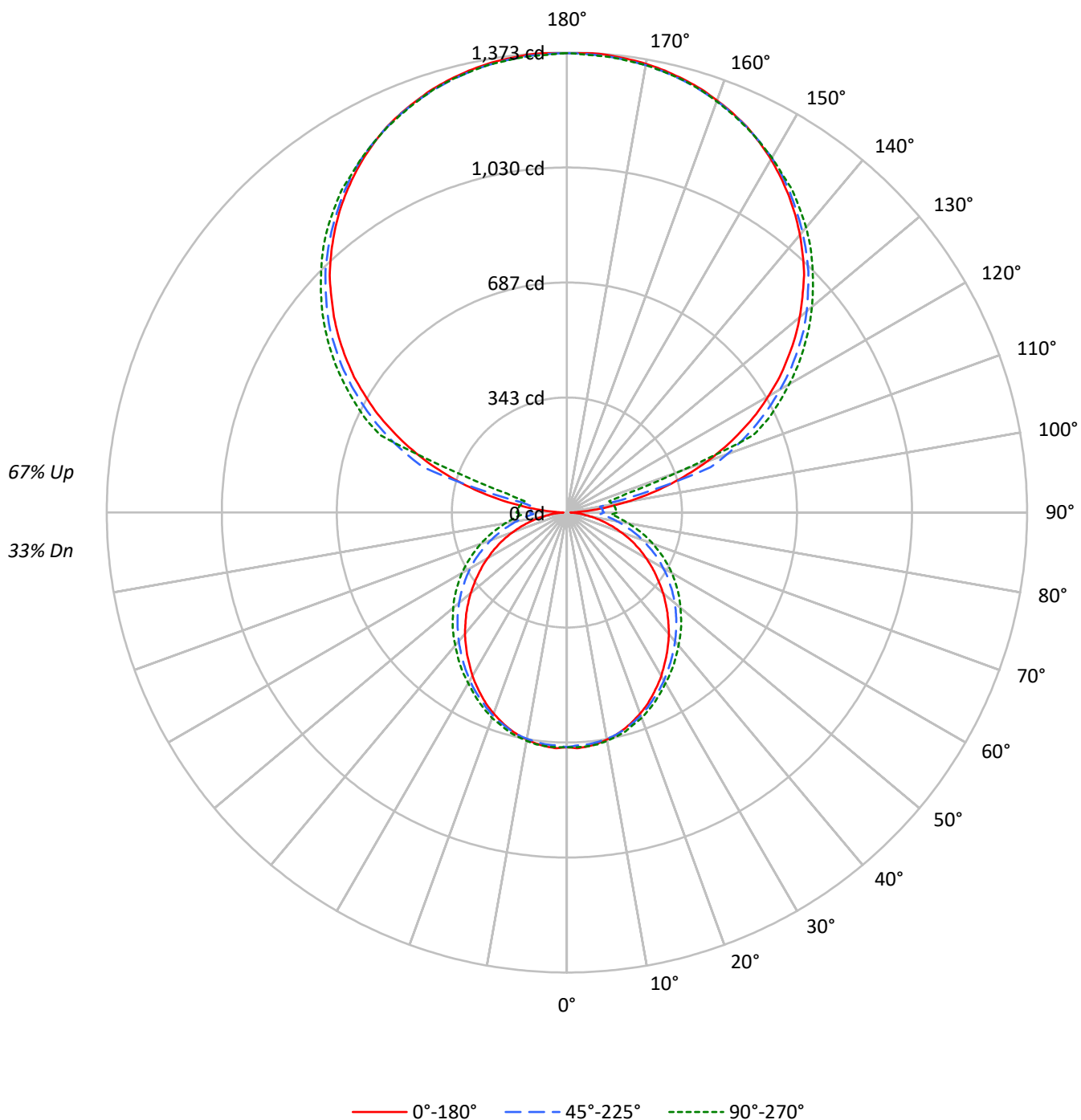
Lumens per Lamp: N/A
Luminaire Lumens: 6537.0 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	93	89	85	81	84	80	77	73	64	61	59	49	47	46	35	34	33
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	29	27
3	77	67	60	54	69	61	55	49	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19
5	64	53	45	39	58	48	41	35	38	33	29	29	26	23	21	19	17
6	59	47	39	33	53	43	36	31	34	29	25	26	23	20	19	17	15
7	55	42	35	29	49	38	32	27	31	26	22	24	20	17	17	15	13
8	51	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	12
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10
10	44	32	25	20	39	29	23	18	24	19	15	18	15	12	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7539	7539	7539
5°	7560	7318	7312
10°	7489	7120	7065
15°	7390	6901	6804
20°	7249	6657	6523
25°	7077	6382	6232
30°	6899	6133	5940
35°	6700	5873	5702
40°	6511	5634	5451
45°	6300	5403	5243
50°	6091	5174	5018
55°	5862	4940	4812
60°	5637	4699	4600
65°	5405	4444	4351
70°	5056	4156	4096
75°	4614	3828	3832
80°	4099	3498	3531
85°	3592	3230	3314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6300 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	1.0
10°-20°	189.4	2.9
20°-30°	283.3	4.3
30°-40°	338.2	5.2
40°-50°	353.8	5.4
50°-60°	332.1	5.1
60°-70°	277.4	4.2
70°-80°	198.3	3.0
80°-90°	120.7	1.8
90°-100°	122.5	1.9
100°-110°	288.3	4.4
110°-120°	609.3	9.3
120°-130°	748.0	11.4
130°-140°	786.3	12.0
140°-150°	728.5	11.1
150°-160°	586.0	9.0
160°-170°	378.2	5.8
170°-180°	130.3	2.0
0°-30°	539.1	8.2
0°-40°	877.3	13.4
0°-60°	1563.2	23.9
0°-90°	2159.6	33.0
90°-120°	1020.1	15.6
90°-150°	3282.9	50.2
90°-180°	4377.0	67.0
0°-180°	6537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	701	700	695	701	700	67
15°	668	670	669	677	676	188
25°	603	610	613	623	623	278
35°	519	531	541	552	556	324
45°	424	442	462	476	482	327
55°	324	349	376	397	403	290
65°	224	253	287	310	317	221
75°	121	157	195	220	230	130
85°	37	76	116	142	150	38
90°	11	58	111	141	150	11
95°	70	58	107	138	146	81
105°	310	339	280	121	130	328
115°	573	589	625	654	664	566
125°	805	813	839	857	865	720
135°	1001	1006	1019	1036	1036	771
145°	1154	1160	1162	1170	1174	722
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.4	700.4	700.4	700.4	700.4
2.5°	704.2	702.0	695.9	702.0	701.2
5°	701.2	699.7	695.1	701.2	700.4
7.5°	695.9	695.9	691.3	698.9	698.1
10°	688.2	689.7	685.9	693.6	692.0
12.5°	679.1	681.4	679.1	685.9	684.4
15°	667.6	669.9	669.1	676.8	676.0
17.5°	653.9	658.5	657.7	664.6	663.0
20°	638.6	643.2	644.7	651.6	652.4
22.5°	622.6	627.2	629.5	638.6	637.9
25°	602.8	610.4	612.7	622.6	622.6
27.5°	583.7	592.1	596.7	605.1	605.8
30°	563.1	573.0	579.1	588.3	588.3
32.5°	540.2	551.6	560.0	570.0	572.2
35°	518.8	531.0	541.0	552.4	555.5
37.5°	495.9	509.7	521.1	534.1	536.4
40°	473.1	486.8	502.1	515.0	518.1
42.5°	447.9	465.4	481.5	495.9	500.5
45°	424.2	442.5	461.6	476.1	482.2
47.5°	399.0	419.6	441.0	457.0	461.6
50°	374.6	396.0	419.6	437.2	442.5
52.5°	348.7	371.6	398.3	416.6	423.5
55°	323.5	348.7	376.2	396.8	402.9
57.5°	299.1	325.0	354.8	375.4	382.3
60°	273.2	300.6	331.9	353.3	361.7
62.5°	248.7	277.0	310.5	331.9	339.5
65°	223.6	253.3	286.9	309.8	317.4
67.5°	198.4	229.7	263.2	288.4	294.5
70°	171.7	204.5	241.1	265.5	273.2
72.5°	147.3	180.1	218.2	243.4	251.0
75°	121.3	157.2	195.3	220.5	229.7
77.5°	99.2	135.1	173.2	199.9	206.8
80°	75.5	112.9	152.6	178.5	186.2
82.5°	54.9	93.1	133.5	159.5	167.1
85°	37.4	75.5	116.0	141.9	149.5
87.5°	22.9	61.0	100.0	125.9	133.5
90°	10.9	58.5	110.6	140.7	150.4
92.5°	32.6	59.3	106.6	138.9	146.8
95°	70.5	58.5	107.1	137.9	145.5
97.5°	120.7	119.7	103.6	134.5	143.3
100°	179.1	223.8	100.0	130.3	138.9
102.5°	245.5	280.1	137.2	125.0	134.6
105°	309.7	339.2	280.3	121.4	130.3
107.5°	377.1	402.4	448.9	312.6	186.0
110°	444.7	466.5	508.2	494.5	355.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	509.9	527.7	567.9	596.1	601.0
115°	573.3	588.6	625.2	653.7	663.9
117.5°	636.4	649.7	680.8	707.2	714.3
120°	693.8	706.8	734.9	760.7	766.0
122.5°	752.9	761.5	789.2	811.1	817.5
125°	805.1	813.2	839.4	857.4	864.9
127.5°	858.0	865.4	889.6	907.9	911.2
130°	906.9	914.3	933.7	952.2	954.8
132.5°	953.0	961.1	975.7	993.5	995.7
135°	1000.9	1006.3	1018.8	1035.5	1036.3
137.5°	1041.6	1049.1	1056.4	1073.7	1075.5
140°	1081.7	1087.8	1093.1	1108.6	1110.4
142.5°	1119.4	1124.7	1127.7	1140.7	1141.4
145°	1154.0	1160.3	1162.4	1170.5	1173.6
147.5°	1186.8	1191.9	1194.0	1198.3	1196.2
150°	1217.4	1220.4	1222.5	1224.5	1223.0
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)