

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: P1031832

Luminaire Tested: S123DIW-B560D755UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031832
REPORT IS A COMBINATION OF REPORTS P991827 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D755UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

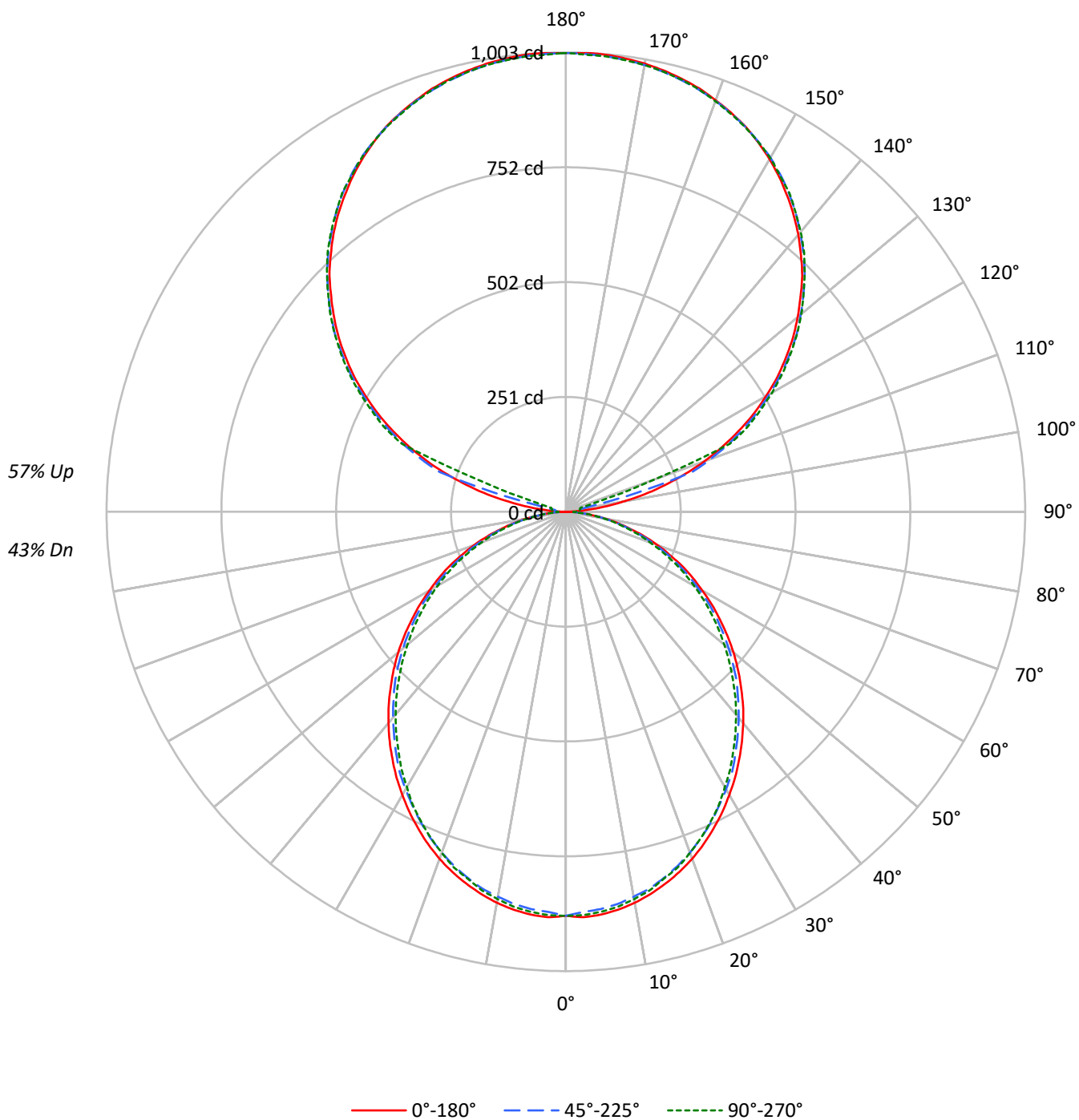
Lumens per Lamp: N/A
Luminaire Lumens: 5352.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
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	96	96	96	96	79	79	79	64	64	64	50	50	50
1	96	92	88	84	88	84	81	78	69	67	65	56	55	53	44	43	42
2	88	80	74	69	80	73	68	64	61	57	54	49	47	44	38	37	35
3	80	70	63	57	73	65	58	53	54	49	45	43	40	37	34	32	30
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	30	28	26
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	27	25	22
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9496	9496	9496
5°	9520	9168	9155
10°	9435	8858	8767
15°	9304	8535	8345
20°	9154	8177	7926
25°	8959	7799	7479
30°	8746	7408	7008
35°	8523	7008	6541
40°	8289	6588	6081
45°	8033	6180	5601
50°	7771	5723	5118
55°	7436	5250	4629
60°	7090	4726	4109
65°	6766	4159	3567
70°	6299	3530	2934
75°	5626	2795	2277
80°	4859	1964	1612
85°	3785	1055	807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	1.6
10°-20°	234.8	4.4
20°-30°	346.8	6.5
30°-40°	405.1	7.6
40°-50°	407.2	7.6
50°-60°	357.7	6.7
60°-70°	266.4	5.0
70°-80°	151.6	2.8
80°-90°	45.1	0.8
90°-100°	35.3	0.7
100°-110°	170.8	3.2
110°-120°	418.5	7.8
120°-130°	531.3	9.9
130°-140°	567.6	10.6
140°-150°	530.8	9.9
150°-160°	428.1	8.0
160°-170°	276.3	5.2
170°-180°	95.2	1.8
0°-30°	664.8	12.4
0°-40°	1069.9	20.0
0°-60°	1834.9	34.3
0°-90°	2298.0	42.9
90°-120°	624.7	11.7
90°-150°	2254.4	42.1
90°-180°	3054.0	57.1
0°-180°	5352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	883	879	871	878	877	84
15°	840	838	828	834	829	237
25°	763	759	749	750	747	352
35°	660	655	646	641	637	413
45°	541	538	528	519	515	418
55°	410	410	400	391	388	368
65°	280	276	268	262	260	276
75°	148	145	143	139	136	158
85°	39	38	38	36	36	42
90°	1	8	18	21	22	5
95°	45	15	23	28	28	54
105°	222	230	163	31	33	235
115°	416	420	427	435	438	411
125°	586	592	595	597	598	524
135°	730	735	738	740	738	562
145°	842	848	849	851	851	527
155°	928	927	927	931	927	428
165°	979	976	976	982	976	277
175°	1002	998	999	1004	998	95
180°	1002	1002	1002	1002	1002	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.2	882.2	882.2	882.2	882.2
2.5°	886.0	883.0	874.6	882.2	881.5
5°	883.0	879.2	870.8	878.4	876.9
7.5°	876.1	872.3	864.0	870.8	870.1
10°	867.0	863.2	853.4	860.2	858.7
12.5°	854.9	851.9	842.8	847.3	846.6
15°	840.5	837.5	827.6	833.7	829.1
17.5°	824.6	820.8	810.9	815.5	813.9
20°	806.4	801.8	791.9	795.0	792.7
22.5°	785.9	781.3	771.5	773.7	770.7
25°	763.1	758.6	748.7	749.5	747.2
27.5°	739.6	735.0	724.4	725.2	722.9
30°	713.8	710.0	699.4	699.4	694.1
32.5°	688.0	682.7	675.1	669.8	667.5
35°	660.0	655.4	645.5	641.0	637.2
37.5°	631.9	625.8	616.0	610.6	608.4
40°	602.3	597.7	587.1	581.1	578.0
42.5°	572.7	567.4	556.8	550.7	547.7
45°	540.9	537.8	528.0	518.9	515.1
47.5°	509.8	505.2	496.1	487.0	484.0
50°	477.9	474.1	464.2	455.9	451.3
52.5°	444.5	442.2	431.6	424.8	420.2
55°	410.4	409.6	399.8	391.4	387.6
57.5°	378.5	375.5	367.9	360.3	355.8
60°	343.6	342.9	333.8	326.9	323.1
62.5°	312.5	310.3	301.1	294.3	292.0
65°	279.9	276.1	268.5	262.5	260.2
67.5°	245.0	242.0	235.9	230.6	227.6
70°	213.9	209.4	204.8	199.5	195.7
72.5°	181.3	178.3	173.0	168.4	166.9
75°	147.9	144.9	142.6	138.8	136.5
77.5°	118.3	116.8	113.8	110.8	110.8
80°	89.5	87.2	85.7	85.0	85.0
82.5°	61.4	61.4	61.4	59.9	59.2
85°	39.4	37.9	37.9	36.4	36.4
87.5°	19.7	17.4	16.7	15.9	15.9
90°	0.7	8.2	17.9	20.8	22.3
92.5°	17.1	12.7	19.4	24.6	25.3
95°	45.4	14.9	23.1	28.3	28.3
97.5°	82.6	61.8	23.8	29.8	30.5
100°	125.8	140.7	24.6	30.5	31.3
102.5°	174.9	184.6	55.1	30.5	32.0
105°	221.8	230.0	163.0	31.3	32.7
107.5°	271.7	278.4	289.5	174.9	77.4
110°	321.5	327.5	335.7	311.1	204.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	369.2	374.4	382.6	389.2	387.8
115°	416.0	420.5	427.2	434.6	437.6
117.5°	462.2	467.4	471.1	477.1	477.8
120°	504.6	511.3	513.5	519.5	519.5
122.5°	547.8	553.0	556.0	559.7	560.4
125°	586.5	592.4	595.4	596.9	598.4
127.5°	625.2	631.1	634.9	637.1	635.6
130°	660.9	666.9	669.8	672.8	671.3
132.5°	695.1	701.1	703.3	706.3	704.1
135°	730.1	734.6	737.6	739.8	737.6
137.5°	759.9	765.8	767.3	771.1	769.6
140°	789.7	794.1	796.4	799.3	797.8
142.5°	817.2	821.7	823.9	826.1	823.9
145°	842.5	847.7	849.2	850.7	850.7
147.5°	867.1	870.8	872.3	873.8	870.0
150°	889.4	891.6	893.1	894.6	892.4
152.5°	909.5	910.2	911.0	914.0	910.2
155°	928.1	926.6	927.3	931.1	926.6
157.5°	943.0	943.0	942.2	946.7	940.7
160°	956.4	955.6	954.9	959.4	954.1
162.5°	969.0	966.8	966.1	971.3	966.8
165°	978.7	976.5	975.7	981.7	976.5
167.5°	986.9	983.9	983.9	989.9	983.9
170°	993.6	990.6	990.6	996.6	990.6
172.5°	998.1	994.3	995.1	1001.0	994.3
175°	1001.8	998.1	998.8	1004.0	998.1
177.5°	1003.3	999.5	1000.3	1006.2	998.8
180°	1001.8	1001.8	1001.8	1001.8	1001.8

(END OF REPORT)