

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: P1031375

Luminaire Tested: S123DIW-B1000D460UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031375
REPORT IS A COMBINATION OF REPORTS P990778 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

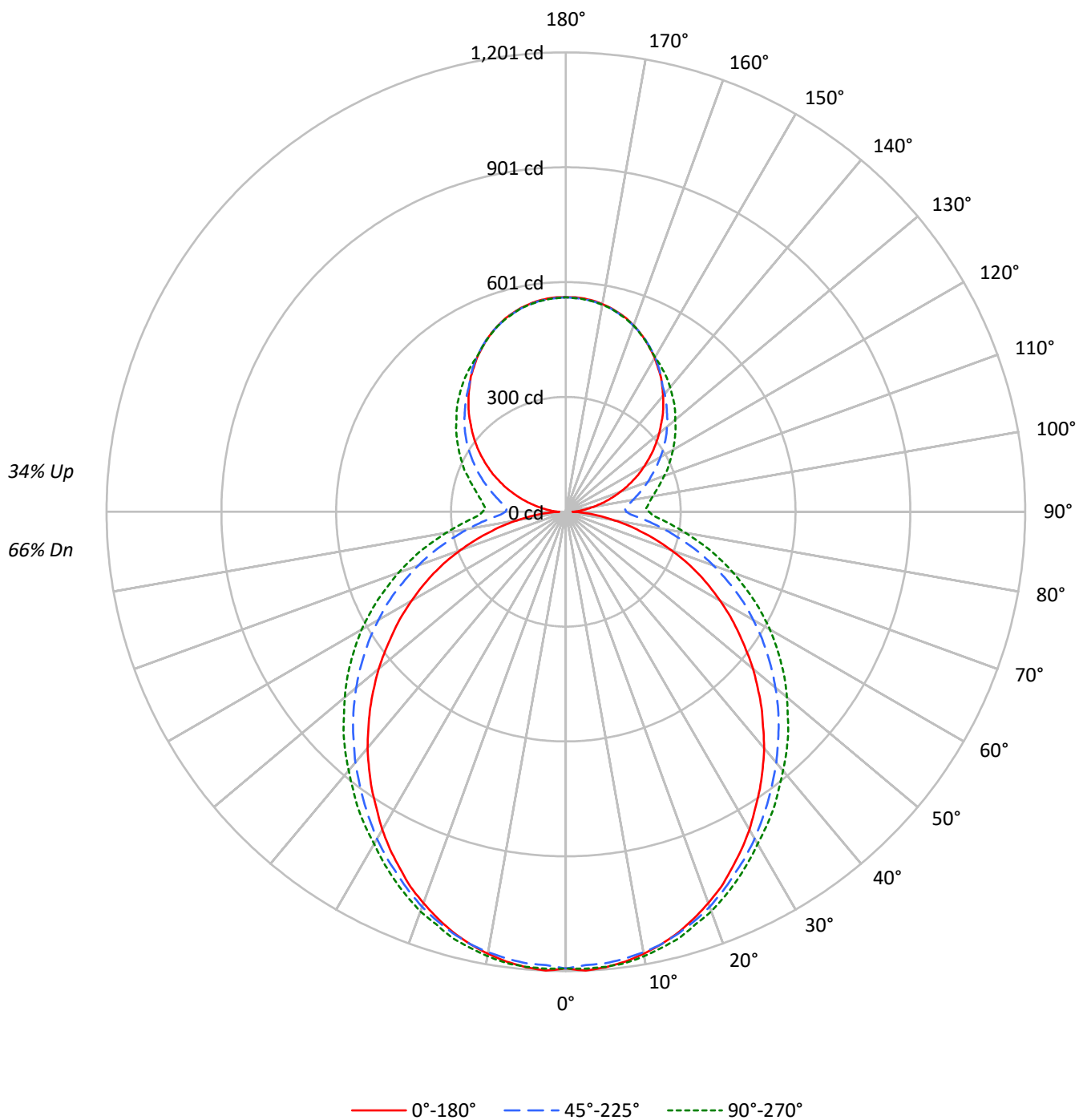
Lumens per Lamp: N/A
Luminaire Lumens: 5568.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	111	111	111	111		104	104	104	104		92	92	92		81	81	81		71	71	71
1	100	95	90	86		94	89	85	82		79	76	73		69	67	65		60	59	57
2	91	82	75	69		85	77	71	66		68	64	59		60	56	53		52	50	47
3	82	72	64	57		77	68	60	55		60	54	49		53	48	44		46	42	39
4	75	63	55	48		70	60	52	46		53	47	42		47	42	38		41	37	34
5	69	56	48	41		64	53	45	39		47	41	36		42	37	32		37	33	29
6	63	51	42	36		59	48	40	34		43	36	31		38	32	28		33	29	26
7	59	46	37	31		55	43	35	30		39	32	27		34	29	25		30	26	23
8	54	41	33	28		51	39	32	27		35	29	24		31	26	22		28	23	20
9	51	38	30	25		48	36	29	24		32	26	22		29	24	20		26	21	18
10	47	35	27	22		45	33	26	21		30	24	20		27	22	18		24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12853	12853	12853
5°	12888	12476	12466
10°	12768	12138	12046
15°	12598	11764	11599
20°	12358	11349	11120
25°	12064	10880	10624
30°	11761	10457	10127
35°	11423	10011	9720
40°	11100	9605	9292
45°	10740	9211	8939
50°	10386	8821	8555
55°	9993	8421	8203
60°	9609	8011	7840
65°	9213	7575	7418
70°	8620	7085	6983
75°	7867	6528	6532
80°	6993	5962	6019
85°	6119	5505	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10740 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	2.0
10°-20°	322.9	5.8
20°-30°	482.9	8.7
30°-40°	576.5	10.4
40°-50°	603.2	10.8
50°-60°	566.1	10.2
60°-70°	472.8	8.5
70°-80°	338.1	6.1
80°-90°	202.4	3.6
90°-100°	162.5	2.9
100°-110°	202.2	3.6
110°-120°	248.0	4.5
120°-130°	280.1	5.0
130°-140°	290.9	5.2
140°-150°	273.7	4.9
150°-160°	227.7	4.1
160°-170°	151.6	2.7
170°-180°	53.1	1.0
0°-30°	919.1	16.5
0°-40°	1495.6	26.9
0°-60°	2664.9	47.9
0°-90°	3678.2	66.1
90°-120°	612.7	11.0
90°-150°	1457.5	26.2
90°-180°	1890.0	33.9
0°-180°	5568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1195	1193	1185	1195	1194	113
15°	1138	1142	1141	1154	1152	321
25°	1028	1041	1044	1061	1061	474
35°	884	905	922	942	947	553
45°	723	754	787	812	822	558
55°	552	594	641	676	687	494
65°	381	432	489	528	541	377
75°	207	268	333	376	392	221
85°	64	129	198	242	255	66
90°	17	85	158	204	217	14
95°	40	94	161	204	216	40
105°	110	142	202	238	250	117
115°	194	211	257	288	298	192
125°	278	279	316	342	349	248
135°	358	359	373	395	401	276
145°	433	432	434	443	447	270
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.1	1194.1	1194.1	1194.1	1194.1
2.5°	1200.6	1196.7	1186.3	1196.7	1195.4
5°	1195.4	1192.8	1185.0	1195.4	1194.1
7.5°	1186.3	1186.3	1178.5	1191.5	1190.2
10°	1173.3	1175.9	1169.4	1182.4	1179.8
12.5°	1157.6	1161.5	1157.6	1169.4	1166.8
15°	1138.1	1142.0	1140.7	1153.7	1152.4
17.5°	1114.7	1122.5	1121.2	1132.9	1130.3
20°	1088.7	1096.5	1099.1	1110.8	1112.1
22.5°	1061.4	1069.2	1073.1	1088.7	1087.4
25°	1027.6	1040.6	1044.5	1061.4	1061.4
27.5°	995.1	1009.4	1017.2	1031.5	1032.8
30°	959.9	976.8	987.3	1002.9	1002.9
32.5°	920.9	940.4	954.7	971.6	975.5
35°	884.5	905.3	922.2	941.7	946.9
37.5°	845.5	868.9	888.4	910.5	914.4
40°	806.5	829.9	855.9	878.0	883.2
42.5°	763.5	793.4	820.8	845.5	853.3
45°	723.2	754.4	786.9	811.7	822.1
47.5°	680.3	715.4	751.8	779.1	786.9
50°	638.7	675.1	715.4	745.3	754.4
52.5°	594.4	633.5	679.0	710.2	721.9
55°	551.5	594.4	641.3	676.4	686.8
57.5°	509.9	554.1	604.8	640.0	651.7
60°	465.7	512.5	565.8	602.2	616.5
62.5°	424.0	472.2	529.4	565.8	578.8
65°	381.1	431.8	489.1	528.1	541.1
67.5°	338.2	391.5	448.8	491.7	502.1
70°	292.7	348.6	411.0	452.7	465.7
72.5°	251.0	307.0	372.0	414.9	427.9
75°	206.8	267.9	333.0	375.9	391.5
77.5°	169.1	230.2	295.3	340.8	352.5
80°	128.8	192.5	260.1	304.4	317.4
82.5°	93.7	158.7	227.6	271.9	284.9
85°	63.7	128.8	197.7	241.9	254.9
87.5°	39.0	104.1	170.4	214.6	227.6
90°	17.3	85.4	157.6	203.5	217.4
92.5°	28.8	87.4	155.1	199.3	210.1
95°	40.3	94.1	161.4	203.5	216.5
97.5°	55.7	104.7	168.6	209.8	222.3
100°	71.6	115.9	178.0	217.0	230.9
102.5°	90.1	127.9	189.5	227.3	239.8
105°	109.5	141.6	201.6	238.0	250.5
107.5°	131.1	158.9	214.0	250.4	261.7
110°	151.0	175.2	228.1	263.8	273.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.0	191.6	241.0	275.8	287.5
115°	193.7	210.6	256.6	288.3	298.3
117.5°	216.2	227.0	270.3	301.6	310.7
120°	235.6	244.7	285.4	314.9	323.2
122.5°	257.2	261.5	301.0	328.2	336.0
125°	277.9	279.2	316.0	341.6	348.9
127.5°	298.2	299.5	331.1	354.5	361.8
130°	318.4	320.7	345.3	368.3	373.0
132.5°	337.4	340.9	359.5	380.7	387.6
135°	358.1	359.4	373.3	394.9	400.6
137.5°	377.0	377.9	388.4	407.0	412.1
140°	395.6	397.8	402.1	421.2	424.6
142.5°	413.6	414.5	415.4	431.9	436.2
145°	432.6	432.1	433.5	443.4	446.9
147.5°	447.6	449.3	450.6	454.5	457.1
150°	464.7	465.6	466.5	466.5	466.5
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)