

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: P1031357

Luminaire Tested: S123DIW-B1000D460UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031357
REPORT IS A COMBINATION OF REPORTS P990751 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

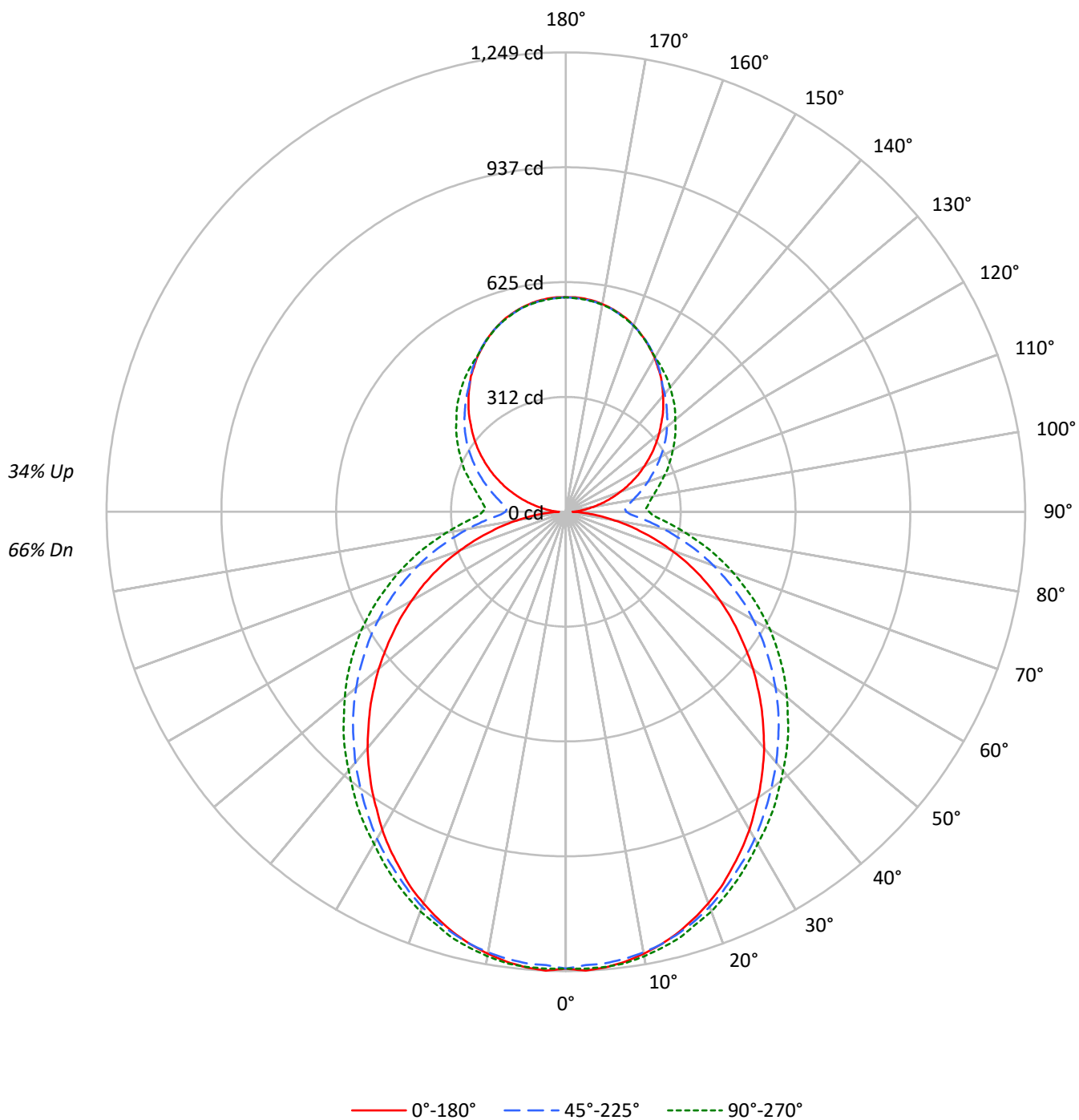
Lumens per Lamp: N/A
Luminaire Lumens: 5791.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	13369	13369	13369
5°	13405	12976	12966
10°	13279	12625	12529
15°	13104	12237	12065
20°	12854	11804	11566
25°	12548	11317	11051
30°	12233	10876	10532
35°	11881	10413	10110
40°	11544	9989	9664
45°	11171	9580	9297
50°	10802	9175	8898
55°	10393	8758	8531
60°	9993	8332	8156
65°	9582	7879	7716
70°	8964	7369	7261
75°	8182	6788	6793
80°	7269	6203	6260
85°	6368	5725	5878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	2.0
10°-20°	335.9	5.8
20°-30°	502.3	8.7
30°-40°	599.7	10.4
40°-50°	627.4	10.8
50°-60°	588.8	10.2
60°-70°	491.8	8.5
70°-80°	351.7	6.1
80°-90°	210.5	3.6
90°-100°	169.0	2.9
100°-110°	210.3	3.6
110°-120°	258.0	4.5
120°-130°	291.3	5.0
130°-140°	302.5	5.2
140°-150°	284.7	4.9
150°-160°	236.8	4.1
160°-170°	157.6	2.7
170°-180°	55.2	1.0
0°-30°	955.9	16.5
0°-40°	1555.6	26.9
0°-60°	2771.8	47.9
0°-90°	3825.7	66.1
90°-120°	637.2	11.0
90°-150°	1515.7	26.2
90°-180°	1965.0	33.9
0°-180°	5791.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1243	1241	1232	1243	1242	118
15°	1184	1188	1186	1200	1199	333
25°	1069	1082	1086	1104	1104	493
35°	920	942	959	980	985	575
45°	752	785	818	844	855	580
55°	574	618	667	704	714	514
65°	396	449	509	549	563	392
75°	215	279	346	391	407	230
85°	66	134	206	252	265	68
90°	18	89	164	212	226	15
95°	42	98	168	212	225	41
105°	114	147	210	247	260	121
115°	202	219	267	300	310	200
125°	289	290	329	355	363	258
135°	372	374	388	411	417	287
145°	450	449	451	461	465	281
155°	514	514	514	516	513	236
165°	559	558	558	561	558	158
175°	582	580	580	583	580	55
180°	583	583	583	583	583	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.0	1242.0	1242.0	1242.0	1242.0
2.5°	1248.7	1244.7	1233.9	1244.7	1243.3
5°	1243.3	1240.6	1232.5	1243.3	1242.0
7.5°	1233.9	1233.9	1225.7	1239.3	1237.9
10°	1220.3	1223.0	1216.3	1229.8	1227.1
12.5°	1204.1	1208.1	1204.1	1216.3	1213.6
15°	1183.8	1187.9	1186.5	1200.0	1198.7
17.5°	1159.4	1167.6	1166.2	1178.4	1175.7
20°	1132.4	1140.5	1143.2	1155.4	1156.7
22.5°	1104.0	1112.1	1116.2	1132.4	1131.0
25°	1068.8	1082.3	1086.4	1104.0	1104.0
27.5°	1035.0	1049.9	1058.0	1072.9	1074.2
30°	998.4	1016.0	1026.9	1043.1	1043.1
32.5°	957.9	978.2	993.0	1010.6	1014.7
35°	920.0	941.6	959.2	979.5	984.9
37.5°	879.4	903.7	924.0	947.0	951.1
40°	838.8	863.2	890.2	913.2	918.6
42.5°	794.2	825.3	853.7	879.4	887.5
45°	752.2	784.7	818.5	844.2	855.0
47.5°	707.6	744.1	782.0	810.4	818.5
50°	664.3	702.2	744.1	775.2	784.7
52.5°	618.3	658.9	706.2	738.7	750.9
55°	573.6	618.3	667.0	703.5	714.3
57.5°	530.3	576.3	629.1	665.6	677.8
60°	484.3	533.0	588.5	626.4	641.3
62.5°	441.0	491.1	550.6	588.5	602.0
65°	396.4	449.2	508.7	549.3	562.8
67.5°	351.8	407.2	466.8	511.4	522.2
70°	304.4	362.6	427.5	470.8	484.3
72.5°	261.1	319.3	386.9	431.6	445.1
75°	215.1	278.7	346.3	391.0	407.2
77.5°	175.9	239.5	307.1	354.5	366.6
80°	133.9	200.2	270.6	316.6	330.1
82.5°	97.4	165.1	236.8	282.8	296.3
85°	66.3	133.9	205.6	251.6	265.2
87.5°	40.6	108.2	177.2	223.2	236.8
90°	18.1	88.9	163.9	211.7	226.1
92.5°	29.9	90.9	161.3	207.3	218.6
95°	41.9	97.8	167.8	211.6	225.1
97.5°	57.9	108.9	175.3	218.2	231.2
100°	74.5	120.5	185.0	225.6	240.1
102.5°	93.7	133.0	197.1	236.4	249.4
105°	113.9	147.3	209.6	247.4	260.5
107.5°	136.4	165.2	222.6	260.5	272.2
110°	157.0	182.3	237.3	274.3	284.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	179.9	199.3	250.7	286.8	299.0
115°	201.5	219.1	266.8	299.8	310.1
117.5°	224.8	236.1	281.2	313.7	323.1
120°	245.0	254.5	296.8	327.5	336.1
122.5°	267.4	272.0	313.0	341.4	349.5
125°	289.0	290.4	328.7	355.3	362.9
127.5°	310.1	311.4	344.3	368.7	376.3
130°	331.2	333.4	359.2	383.0	387.9
132.5°	350.8	354.5	373.9	396.0	403.1
135°	372.4	373.8	388.2	410.7	416.6
137.5°	392.1	393.1	403.8	423.2	428.6
140°	411.4	413.7	418.1	438.0	441.6
142.5°	430.2	431.1	432.0	449.1	453.6
145°	449.9	449.4	450.8	461.1	464.7
147.5°	465.4	467.2	468.6	472.7	475.4
150°	483.3	484.2	485.1	485.1	485.1
152.5°	497.9	499.3	499.8	500.7	498.4
155°	513.5	513.5	514.0	515.8	512.6
157.5°	526.8	526.3	526.8	528.6	525.9
160°	539.2	538.2	538.2	540.5	538.7
162.5°	550.2	548.8	549.2	551.5	548.3
165°	559.3	557.9	557.9	560.7	557.5
167.5°	567.1	565.3	565.7	568.5	565.7
170°	573.5	571.7	571.7	574.9	571.7
172.5°	578.6	576.7	576.7	579.5	576.3
175°	581.8	579.9	579.9	582.7	579.5
177.5°	583.6	581.8	581.8	584.5	581.3
180°	583.1	583.1	583.1	583.1	583.1

(END OF REPORT)