

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: P1031356

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031356
REPORT IS A COMBINATION OF REPORTS P990750 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-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

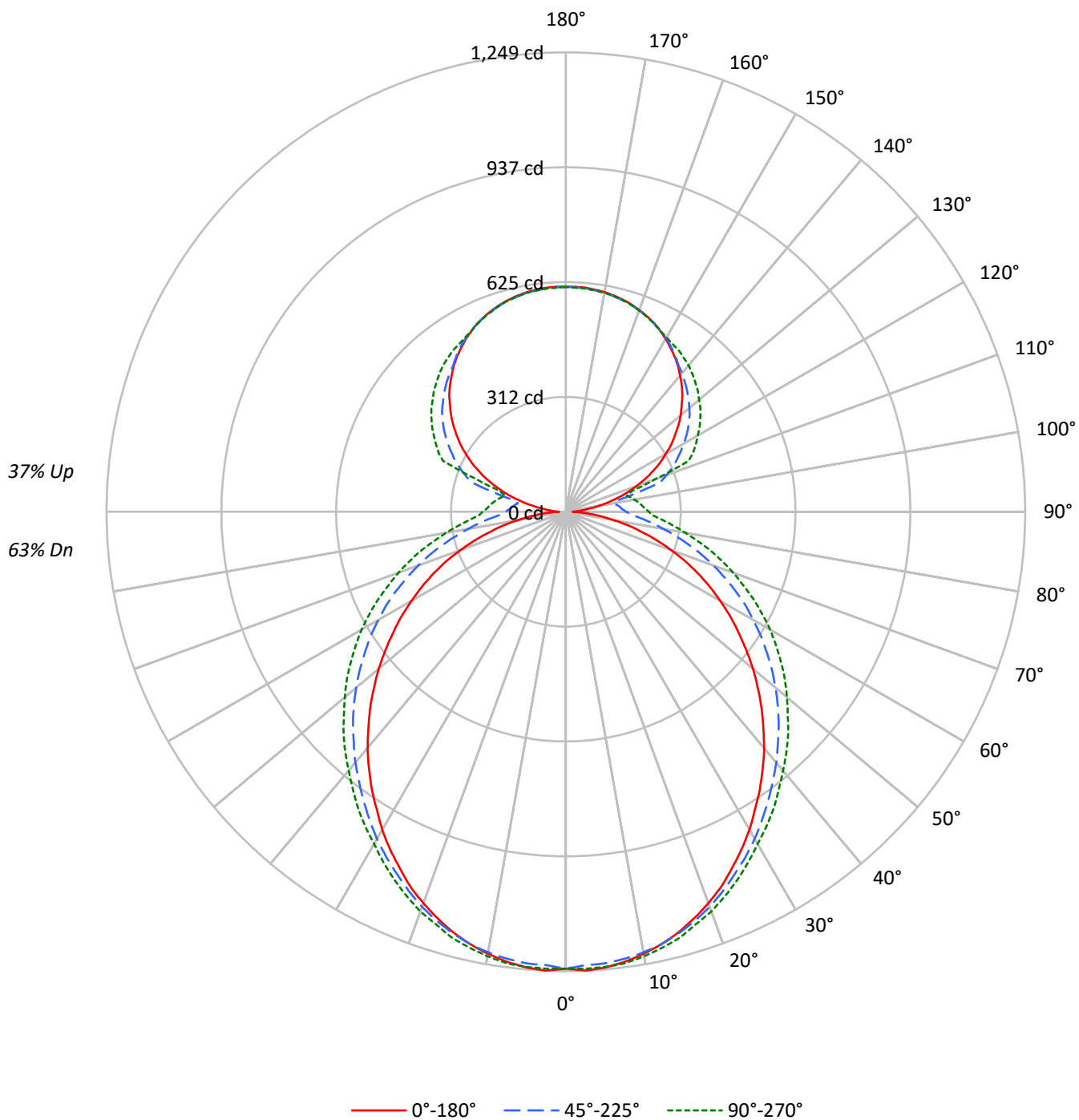
Lumens per Lamp: N/A
Luminaire Lumens: 6039.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	99	94	90	86	93	89	85	81	78	75	72	68	65	63	58	57	55
2	90	82	75	69	84	77	71	66	67	63	59	59	55	52	51	48	45
3	82	71	63	57	76	67	60	54	59	53	49	51	47	43	44	41	38
4	75	63	54	48	70	59	52	46	52	46	41	46	41	37	39	36	32
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	35	31	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	54	43	35	30	38	32	27	33	28	24	29	25	22
8	54	41	33	27	51	39	31	26	35	28	24	31	25	22	27	23	19
9	50	38	30	24	47	36	28	23	32	26	21	28	23	19	25	21	18
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16

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	5.6
20°-30°	502.3	8.3
30°-40°	599.7	9.9
40°-50°	627.4	10.4
50°-60°	588.8	9.7
60°-70°	491.8	8.1
70°-80°	351.7	5.8
80°-90°	210.5	3.5
90°-100°	153.0	2.5
100°-110°	200.9	3.3
110°-120°	320.0	5.3
120°-130°	361.1	6.0
130°-140°	362.9	6.0
140°-150°	327.4	5.4
150°-160°	261.3	4.3
160°-170°	168.6	2.8
170°-180°	58.1	1.0
0°-30°	955.9	15.8
0°-40°	1555.6	25.8
0°-60°	2771.8	45.9
0°-90°	3825.7	63.4
90°-120°	673.9	11.2
90°-150°	1725.3	28.6
90°-180°	2213.0	36.6
0°-180°	6039.0	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	14
95°	43	77	148	193	207	45
105°	146	184	201	158	172	154
115°	261	280	332	370	382	258
125°	362	366	407	436	446	324
135°	448	450	466	492	498	345
145°	516	517	518	530	535	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

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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	163.8	211.6	226.0
92.5°	26.6	82.1	153.9	201.7	214.3
95°	42.6	76.7	148.0	193.2	206.7
97.5°	63.9	99.9	140.3	184.6	198.5
100°	89.0	141.3	132.7	175.5	189.6
102.5°	117.5	161.3	143.2	166.1	180.5
105°	146.2	183.6	201.0	158.4	171.5
107.5°	175.3	207.8	270.1	236.6	189.3
110°	204.3	232.3	291.4	311.7	257.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.4	255.6	312.0	349.8	361.1
115°	260.7	279.6	332.4	369.5	382.1
117.5°	288.9	302.8	351.1	387.2	398.5
120°	313.4	324.2	370.2	404.9	414.4
122.5°	339.7	345.6	389.4	421.4	431.3
125°	362.0	365.6	406.7	436.0	446.4
127.5°	385.6	387.9	423.9	452.4	461.0
130°	407.4	409.7	438.6	466.1	473.3
132.5°	426.9	430.6	452.2	478.4	486.5
135°	448.3	449.7	466.3	492.1	497.5
137.5°	466.4	468.8	479.1	503.1	508.8
140°	483.3	486.0	491.4	513.5	519.4
142.5°	500.1	501.4	502.8	521.8	527.2
145°	515.6	517.3	518.2	530.0	535.4
147.5°	529.1	531.4	532.3	537.3	540.5
150°	542.8	544.1	545.0	546.0	547.3
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)