

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: P1031500

Luminaire Tested: S123DIW-B1165D460UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031500
REPORT IS A COMBINATION OF REPORTS P991080 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB30-4F0-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

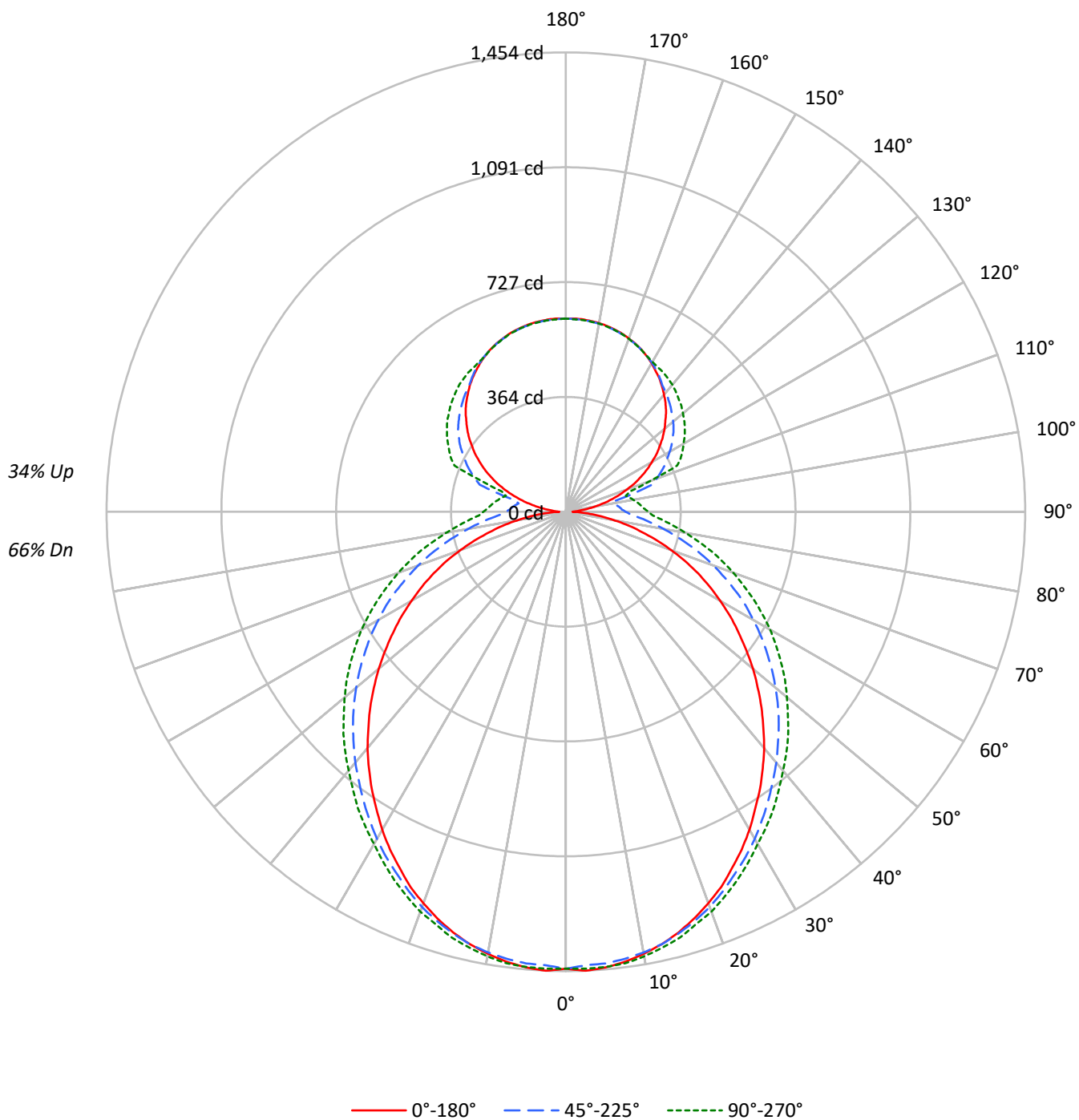
Lumens per Lamp: N/A
Luminaire Lumens: 6725.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
Input Voltage (V):
Input Current (A_{in}): 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	105	105	105	105	92	92	92	81	81	81	71	71	71
1	100	95	90	86	94	89	85	82	79	76	73	69	67	65	61	59	57
2	91	82	75	69	85	77	71	66	68	64	59	60	56	53	53	50	47
3	82	72	64	57	77	68	60	55	60	54	49	53	48	44	46	43	40
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	33	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	55	41	33	28	51	39	32	27	35	29	24	31	26	22	28	24	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15566	15566	15566
5°	15608	15109	15097
10°	15462	14700	14588
15°	15258	14248	14048
20°	14967	13744	13467
25°	14610	13176	12866
30°	14243	12663	12263
35°	13834	12125	11772
40°	13442	11631	11252
45°	13007	11155	10825
50°	12578	10683	10361
55°	12102	10197	9933
60°	11636	9701	9496
65°	11159	9174	8984
70°	10437	8581	8455
75°	9529	7906	7911
80°	8469	7223	7290
85°	7415	6667	6844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13007 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	2.0
10°-20°	391.1	5.8
20°-30°	584.8	8.7
30°-40°	698.2	10.4
40°-50°	730.6	10.9
50°-60°	685.6	10.2
60°-70°	572.6	8.5
70°-80°	409.5	6.1
80°-90°	244.9	3.6
90°-100°	174.7	2.6
100°-110°	216.8	3.2
110°-120°	330.6	4.9
120°-130°	367.1	5.5
130°-140°	365.6	5.4
140°-150°	327.9	4.9
150°-160°	261.3	3.9
160°-170°	168.6	2.5
170°-180°	58.1	0.9
0°-30°	1113.0	16.6
0°-40°	1811.3	26.9
0°-60°	3227.4	48.0
0°-90°	4454.3	66.2
90°-120°	722.0	10.7
90°-150°	1782.7	26.5
90°-180°	2271.0	33.8
0°-180°	6725.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1448	1444	1435	1448	1446	137
15°	1378	1383	1382	1397	1396	388
25°	1244	1260	1265	1285	1285	574
35°	1071	1096	1117	1140	1147	670
45°	876	914	953	983	996	675
55°	668	720	777	819	832	598
65°	462	523	592	640	655	456
75°	250	324	403	455	474	268
85°	77	156	239	293	309	79
90°	21	103	189	244	261	16
95°	45	88	170	222	238	47
105°	148	191	218	181	196	156
115°	262	283	344	387	401	259
125°	363	366	414	448	460	325
135°	449	450	469	499	505	346
145°	516	517	518	532	538	323
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°	1446.1	1446.1	1446.1	1446.1	1446.1
2.5°	1454.0	1449.2	1436.6	1449.2	1447.7
5°	1447.7	1444.5	1435.1	1447.7	1446.1
7.5°	1436.6	1436.6	1427.2	1442.9	1441.4
10°	1420.9	1424.0	1416.2	1431.9	1428.8
12.5°	1402.0	1406.7	1402.0	1416.2	1413.0
15°	1378.4	1383.1	1381.5	1397.3	1395.7
17.5°	1350.0	1359.5	1357.9	1372.1	1368.9
20°	1318.5	1327.9	1331.1	1345.3	1346.8
22.5°	1285.4	1294.9	1299.6	1318.5	1316.9
25°	1244.5	1260.2	1264.9	1285.4	1285.4
27.5°	1205.1	1222.4	1231.9	1249.2	1250.8
30°	1162.5	1183.0	1195.6	1214.5	1214.5
32.5°	1115.3	1138.9	1156.2	1176.7	1181.4
35°	1071.2	1096.4	1116.9	1140.5	1146.8
37.5°	1023.9	1052.3	1075.9	1102.7	1107.4
40°	976.7	1005.0	1036.5	1063.3	1069.6
42.5°	924.7	960.9	994.0	1023.9	1033.4
45°	875.8	913.7	953.0	983.0	995.6
47.5°	823.9	866.4	910.5	943.6	953.0
50°	773.5	817.6	866.4	902.6	913.7
52.5°	719.9	767.2	822.3	860.1	874.3
55°	667.9	719.9	776.6	819.1	831.7
57.5°	617.5	671.1	732.5	775.0	789.2
60°	563.9	620.7	685.2	729.3	746.7
62.5°	513.5	571.8	641.1	685.2	701.0
65°	461.6	523.0	592.3	639.6	655.3
67.5°	409.6	474.2	543.5	595.4	608.1
70°	354.4	422.2	497.8	548.2	563.9
72.5°	304.0	371.8	450.5	502.5	518.3
75°	250.5	324.5	403.3	455.3	474.2
77.5°	204.8	278.8	357.6	412.7	426.9
80°	156.0	233.1	315.1	368.6	384.4
82.5°	113.4	192.2	275.7	329.2	345.0
85°	77.2	156.0	239.4	293.0	308.8
87.5°	47.3	126.0	206.4	259.9	275.7
90°	21.0	102.7	188.9	244.3	260.9
92.5°	29.3	94.3	177.2	232.4	247.0
95°	45.0	87.9	170.1	222.1	237.8
97.5°	66.2	110.2	161.0	212.0	228.1
100°	91.0	150.4	152.0	201.3	217.6
102.5°	119.3	169.3	161.2	190.3	207.0
105°	148.0	190.7	217.6	181.4	196.4
107.5°	176.8	214.0	285.4	257.9	212.6
110°	205.7	237.6	305.6	331.7	279.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	234.8	260.0	324.9	368.2	381.5
115°	261.8	283.4	344.2	386.6	401.0
117.5°	290.0	305.7	361.5	402.9	416.0
120°	314.3	326.2	379.6	419.4	430.4
122.5°	340.6	347.0	397.6	434.5	446.0
125°	362.6	366.2	413.8	447.8	459.7
127.5°	386.2	388.4	429.9	462.8	473.0
130°	408.0	410.2	443.5	475.2	483.7
132.5°	427.4	431.1	456.0	486.1	495.9
135°	448.8	449.9	469.0	498.8	505.2
137.5°	466.9	469.0	480.9	508.4	515.3
140°	483.5	486.2	492.3	517.7	524.7
142.5°	500.3	501.4	502.8	524.7	531.2
145°	515.8	517.3	518.2	531.8	538.1
147.5°	529.1	531.4	532.3	537.9	542.0
150°	542.8	544.1	545.0	546.0	547.8
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)