

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: P1031560

Luminaire Tested: S123DIW-B340D1030UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031560
REPORT IS A COMBINATION OF REPORTS P991212 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB30-4F0-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

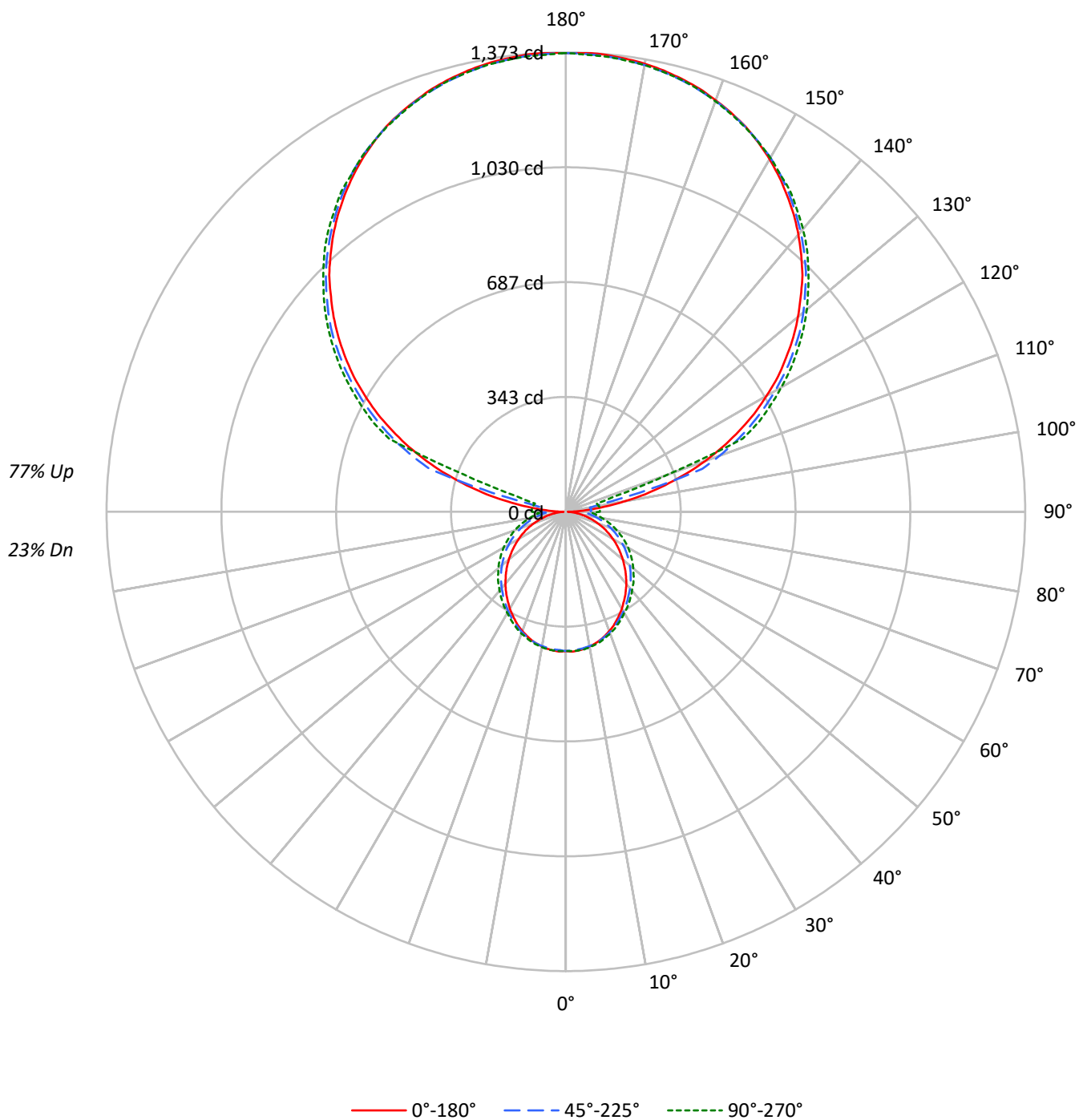
Lumens per Lamp: N/A
Luminaire Lumens: 5582.0 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	50	30	10
RCR																				
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	31	31	23
1	91	87	83	79	81	77	74	71	59	57	55	42	41	40	27	26	25	25	25	18
2	83	76	69	64	73	67	62	58	51	48	45	37	35	33	23	22	21	21	21	15
3	75	66	59	53	67	59	53	48	45	41	37	32	30	27	21	19	18	18	18	12
4	69	58	51	45	61	52	45	40	40	35	32	29	26	23	18	16	15	15	15	11
5	63	52	44	38	56	46	39	34	35	31	27	26	22	20	16	14	13	13	13	9
6	58	46	38	33	51	41	34	30	32	27	23	23	20	17	15	13	11	11	11	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	13	11	10	10	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	9	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	8	8	6
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	10	9	7	7	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4481	4481	4481
5°	4493	4349	4346
10°	4451	4232	4199
15°	4392	4102	4044
20°	4308	3957	3877
25°	4205	3793	3704
30°	4101	3646	3530
35°	3981	3490	3389
40°	3869	3349	3239
45°	3744	3211	3116
50°	3620	3075	2982
55°	3484	2936	2859
60°	3349	2793	2733
65°	3213	2641	2586
70°	3004	2470	2433
75°	2743	2276	2277
80°	2438	2079	2098
85°	2132	1919	1970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3744 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	0.7
10°-20°	112.6	2.0
20°-30°	168.3	3.0
30°-40°	201.0	3.6
40°-50°	210.3	3.8
50°-60°	197.3	3.5
60°-70°	164.8	3.0
70°-80°	117.9	2.1
80°-90°	72.9	1.3
90°-100°	92.4	1.7
100°-110°	266.2	4.8
110°-120°	594.5	10.7
120°-130°	739.6	13.3
130°-140°	782.5	14.0
140°-150°	727.7	13.0
150°-160°	586.0	10.5
160°-170°	378.2	6.8
170°-180°	130.3	2.3
0°-30°	320.4	5.7
0°-40°	521.4	9.3
0°-60°	929.0	16.6
0°-90°	1284.6	23.0
90°-120°	953.1	17.1
90°-150°	3202.9	57.4
90°-180°	4297.0	77.0
0°-180°	5582.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	417	416	413	417	416	40
15°	397	398	398	402	402	112
25°	358	363	364	370	370	165
35°	308	316	322	328	330	193
45°	252	263	274	283	287	194
55°	192	207	224	236	239	172
65°	133	150	170	184	189	131
75°	72	93	116	131	136	77
85°	22	45	69	84	89	23
90°	7	39	76	95	102	8
95°	67	43	76	98	102	78
105°	307	329	257	90	96	326
115°	572	583	609	630	638	565
125°	804	812	830	841	846	719
135°	1000	1006	1015	1026	1026	770
145°	1154	1160	1162	1168	1170	722
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.3	416.3	416.3	416.3	416.3
2.5°	418.5	417.2	413.6	417.2	416.7
5°	416.7	415.8	413.1	416.7	416.3
7.5°	413.6	413.6	410.8	415.4	414.9
10°	409.0	409.9	407.7	412.2	411.3
12.5°	403.6	404.9	403.6	407.7	406.7
15°	396.8	398.1	397.7	402.2	401.8
17.5°	388.6	391.3	390.9	395.0	394.1
20°	379.5	382.3	383.2	387.3	387.7
22.5°	370.0	372.7	374.1	379.5	379.1
25°	358.2	362.8	364.1	370.0	370.0
27.5°	346.9	351.9	354.6	359.6	360.0
30°	334.7	340.5	344.2	349.6	349.6
32.5°	321.0	327.8	332.8	338.7	340.1
35°	308.3	315.6	321.5	328.3	330.1
37.5°	294.7	302.9	309.7	317.4	318.8
40°	281.1	289.3	298.4	306.1	307.9
42.5°	266.2	276.6	286.1	294.7	297.5
45°	252.1	263.0	274.3	283.0	286.6
47.5°	237.2	249.4	262.1	271.6	274.3
50°	222.6	235.3	249.4	259.8	263.0
52.5°	207.2	220.8	236.7	247.6	251.7
55°	192.3	207.2	223.6	235.8	239.4
57.5°	177.8	193.2	210.9	223.1	227.2
60°	162.3	178.7	197.3	209.9	214.9
62.5°	147.8	164.6	184.6	197.3	201.8
65°	132.9	150.5	170.5	184.1	188.6
67.5°	117.9	136.5	156.4	171.4	175.0
70°	102.0	121.5	143.3	157.8	162.3
72.5°	87.5	107.0	129.7	144.7	149.2
75°	72.1	93.4	116.1	131.0	136.5
77.5°	58.9	80.3	102.9	118.8	122.9
80°	44.9	67.1	90.7	106.1	110.6
82.5°	32.6	55.3	79.4	94.8	99.3
85°	22.2	44.9	68.9	84.3	88.9
87.5°	13.6	36.3	59.4	74.8	79.4
90°	6.9	39.3	75.6	95.2	101.8
92.5°	28.8	42.2	74.1	96.2	101.3
95°	67.1	43.1	76.5	97.6	102.2
97.5°	117.6	105.5	74.8	96.5	102.1
100°	176.3	211.1	73.1	94.4	99.9
102.5°	243.0	268.9	112.1	91.2	97.8
105°	307.2	329.3	257.1	89.5	95.6
107.5°	375.0	393.7	427.6	282.9	153.5
110°	442.8	459.1	488.4	466.6	324.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.0	521.5	549.9	570.4	572.5
115°	571.8	583.3	608.8	629.8	637.5
117.5°	634.9	645.7	666.2	685.2	689.8
120°	692.5	704.0	721.9	740.6	743.7
122.5°	751.6	759.6	777.8	792.9	797.0
125°	804.2	812.3	829.5	841.0	846.3
127.5°	857.1	864.8	881.2	893.3	894.5
130°	906.0	913.7	926.9	939.5	940.2
132.5°	952.4	960.5	970.4	982.7	982.7
135°	1000.3	1006.0	1015.0	1026.2	1025.5
137.5°	1041.0	1048.8	1053.9	1066.3	1066.6
140°	1081.4	1087.5	1091.8	1102.7	1103.0
142.5°	1119.1	1124.7	1127.7	1136.7	1135.9
145°	1153.7	1160.3	1162.4	1168.0	1169.8
147.5°	1186.8	1191.9	1194.0	1197.4	1194.1
150°	1217.4	1220.4	1222.5	1224.5	1222.4
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)