

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: P1031556

Luminaire Tested: S123DIW-B340D1030UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031556
REPORT IS A COMBINATION OF REPORTS P991185 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

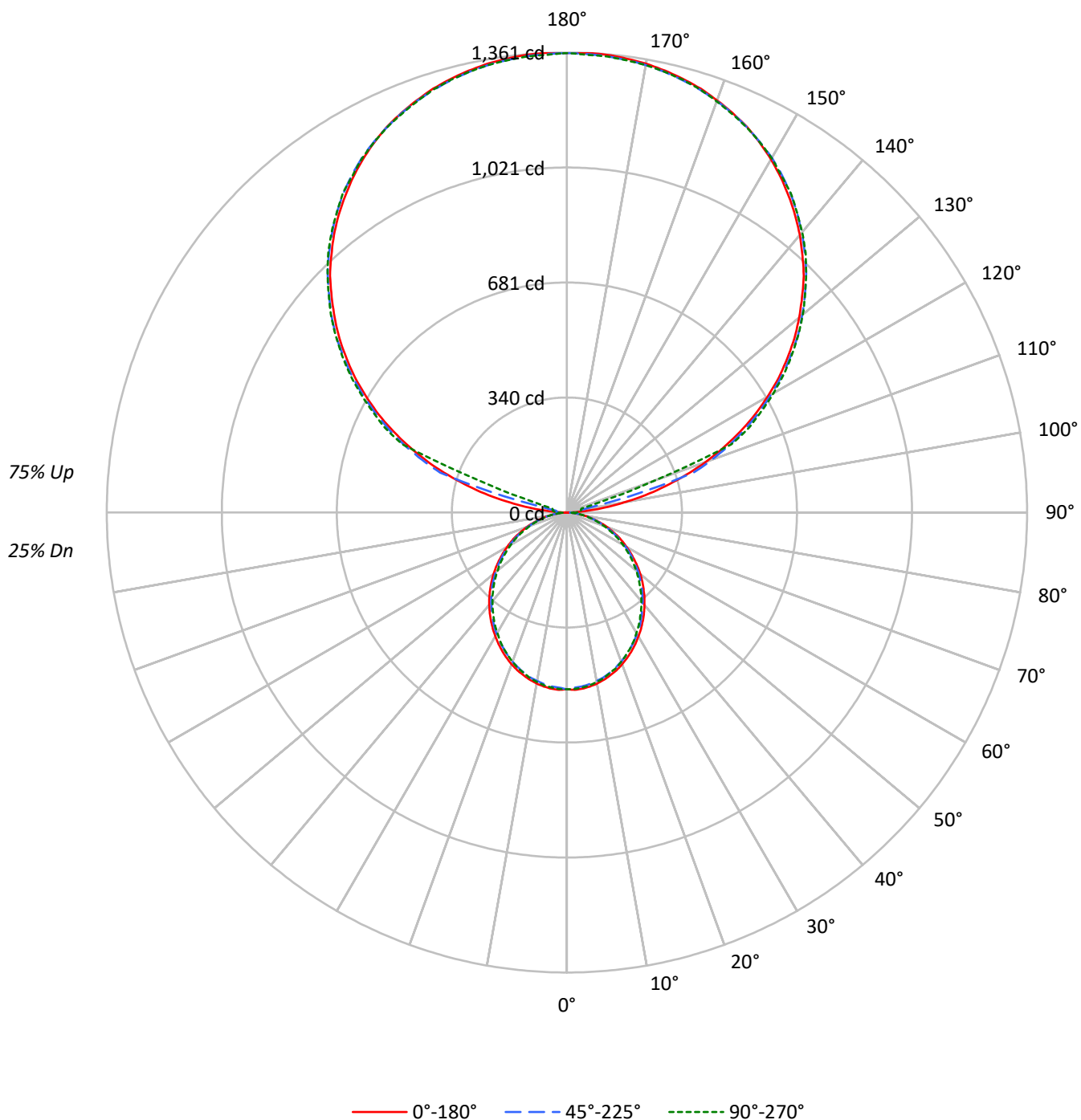
Lumens per Lamp: N/A
Luminaire Lumens: 5508.0 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	45	34	28	24	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5628	5628	5628
5°	5643	5435	5427
10°	5593	5251	5197
15°	5515	5060	4947
20°	5426	4847	4699
25°	5311	4623	4433
30°	5184	4391	4154
35°	5052	4155	3877
40°	4913	3905	3604
45°	4761	3664	3320
50°	4607	3393	3033
55°	4408	3112	2745
60°	4203	2800	2437
65°	4010	2466	2114
70°	3734	2093	1739
75°	3336	1656	1350
80°	2883	1164	956
85°	2248	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4761 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	0.9
10°-20°	139.2	2.5
20°-30°	205.6	3.7
30°-40°	240.1	4.4
40°-50°	241.4	4.4
50°-60°	212.1	3.8
60°-70°	157.9	2.9
70°-80°	89.9	1.6
80°-90°	28.3	0.5
90°-100°	47.9	0.9
100°-110°	231.8	4.2
110°-120°	568.0	10.3
120°-130°	721.0	13.1
130°-140°	770.3	14.0
140°-150°	720.3	13.1
150°-160°	581.0	10.5
160°-170°	374.9	6.8
170°-180°	129.2	2.3
0°-30°	394.1	7.2
0°-40°	634.2	11.5
0°-60°	1087.7	19.7
0°-90°	1363.7	24.8
90°-120°	847.7	15.4
90°-150°	3059.2	55.5
90°-180°	4144.0	75.2
0°-180°	5508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	523	523	523	523	523	
5°	523	521	516	521	520	50
15°	498	496	491	494	492	140
25°	452	450	444	444	443	208
35°	391	388	383	380	378	245
45°	321	319	313	308	305	248
55°	243	243	237	232	230	218
65°	166	164	159	156	154	164
75°	88	86	84	82	81	94
85°	23	22	22	22	22	25
90°	1	11	24	28	30	5
95°	62	20	31	38	38	74
105°	301	312	221	42	44	319
115°	565	571	580	590	594	558
125°	796	804	808	810	812	711
135°	991	997	1001	1004	1001	763
145°	1143	1150	1152	1154	1154	716
155°	1259	1257	1258	1264	1257	580
165°	1328	1325	1324	1332	1325	375
175°	1359	1354	1355	1362	1354	129
180°	1359	1359	1359	1359	1359	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	522.9	522.9	522.9	522.9	522.9
2.5°	525.2	523.4	518.5	522.9	522.5
5°	523.4	521.1	516.2	520.7	519.8
7.5°	519.4	517.1	512.2	516.2	515.8
10°	514.0	511.7	505.9	509.9	509.0
12.5°	506.8	505.0	499.6	502.3	501.8
15°	498.2	496.4	490.6	494.2	491.5
17.5°	488.8	486.5	480.7	483.4	482.5
20°	478.0	475.3	469.4	471.2	469.9
22.5°	465.8	463.1	457.3	458.6	456.8
25°	452.4	449.7	443.8	444.3	442.9
27.5°	438.4	435.7	429.4	429.9	428.5
30°	423.1	420.9	414.6	414.6	411.4
32.5°	407.8	404.7	400.2	397.0	395.7
35°	391.2	388.5	382.7	380.0	377.7
37.5°	374.6	371.0	365.1	362.0	360.6
40°	357.0	354.3	348.0	344.4	342.6
42.5°	339.5	336.3	330.0	326.4	324.6
45°	320.6	318.8	313.0	307.6	305.3
47.5°	302.2	299.5	294.1	288.7	286.9
50°	283.3	281.0	275.2	270.2	267.5
52.5°	263.5	262.1	255.9	251.8	249.1
55°	243.3	242.8	237.0	232.0	229.8
57.5°	224.4	222.6	218.1	213.6	210.9
60°	203.7	203.2	197.8	193.8	191.6
62.5°	185.3	183.9	178.5	174.5	173.1
65°	165.9	163.7	159.2	155.6	154.2
67.5°	145.2	143.4	139.8	136.7	134.9
70°	126.8	124.1	121.4	118.3	116.0
72.5°	107.5	105.7	102.5	99.8	98.9
75°	87.7	85.9	84.5	82.3	80.9
77.5°	70.1	69.2	67.4	65.6	65.6
80°	53.1	51.7	50.8	50.4	50.4
82.5°	36.4	36.4	36.4	35.5	35.1
85°	23.4	22.5	22.5	21.6	21.6
87.5°	11.7	10.3	9.9	9.4	9.4
90°	1.0	11.1	24.2	28.3	30.3
92.5°	23.2	17.2	26.3	33.3	34.3
95°	61.6	20.2	31.3	38.4	38.4
97.5°	112.1	83.8	32.3	40.4	41.4
100°	170.7	190.9	33.3	41.4	42.4
102.5°	237.3	250.5	74.7	41.4	43.4
105°	301.0	312.1	221.2	42.4	44.4
107.5°	368.6	377.7	392.9	237.3	105.0
110°	436.3	444.4	455.5	422.2	277.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	500.9	508.0	519.1	528.2	526.2
115°	564.6	570.6	579.7	589.8	593.9
117.5°	627.2	634.3	639.3	647.4	648.4
120°	684.8	693.8	696.9	705.0	705.0
122.5°	743.3	750.4	754.4	759.5	760.5
125°	795.9	803.9	808.0	810.0	812.0
127.5°	848.4	856.5	861.5	864.5	862.5
130°	896.8	904.9	909.0	913.0	911.0
132.5°	943.3	951.4	954.4	958.5	955.4
135°	990.8	996.8	1000.9	1003.9	1000.9
137.5°	1031.2	1039.3	1041.3	1046.3	1044.3
140°	1071.6	1077.6	1080.7	1084.7	1082.7
142.5°	1108.9	1115.0	1118.0	1121.1	1118.0
145°	1143.3	1150.4	1152.4	1154.4	1154.4
147.5°	1176.6	1181.7	1183.7	1185.7	1180.6
150°	1206.9	1209.9	1212.0	1214.0	1210.9
152.5°	1234.2	1235.2	1236.2	1240.2	1235.2
155°	1259.4	1257.4	1258.4	1263.5	1257.4
157.5°	1279.6	1279.6	1278.6	1284.7	1276.6
160°	1297.8	1296.8	1295.8	1301.8	1294.8
162.5°	1315.0	1311.9	1310.9	1318.0	1311.9
165°	1328.1	1325.1	1324.1	1332.1	1325.1
167.5°	1339.2	1335.2	1335.2	1343.3	1335.2
170°	1348.3	1344.3	1344.3	1352.3	1344.3
172.5°	1354.4	1349.3	1350.3	1358.4	1349.3
175°	1359.4	1354.4	1355.4	1362.4	1354.4
177.5°	1361.4	1356.4	1357.4	1365.5	1355.4
180°	1359.4	1359.4	1359.4	1359.4	1359.4

(END OF REPORT)