

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: P1032193

Luminaire Tested: S123RDIW-B340D1030UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032193
REPORT IS A COMBINATION OF REPORTS P994201 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D1030UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

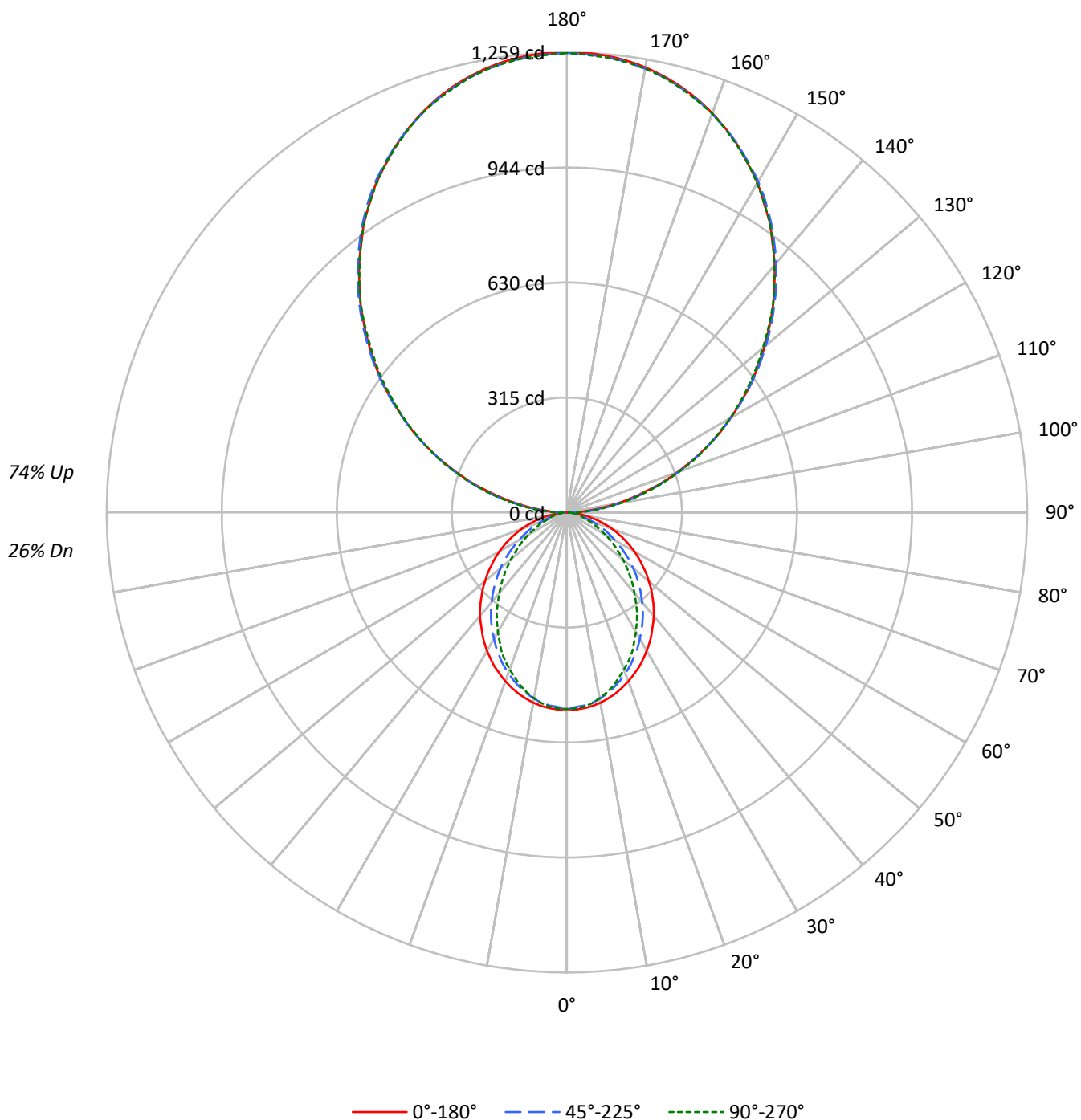
Lumens per Lamp: N/A
Luminaire Lumens: 4703.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	70	70	70	51	51	51	34	34	34
1	93	88	85	81	82	79	76	73	61	59	58	45	44	43	30	30	29
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	26	25
3	77	68	61	56	68	61	55	50	48	44	40	35	33	31	24	22	21
4	70	60	53	47	63	54	48	43	42	38	34	31	29	26	21	20	18
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	17	16
6	59	48	40	35	53	43	36	32	34	29	26	26	22	20	18	16	14
7	55	43	36	30	49	39	32	28	31	26	23	23	20	18	16	14	13
8	51	39	32	27	45	35	29	24	28	23	20	21	18	16	15	13	11
9	47	36	28	24	42	32	26	22	26	21	18	19	16	14	14	12	10
10	44	32	26	21	39	29	23	19	23	19	16	18	15	13	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5789	5789	5789
5°	5798	5584	5569
10°	5752	5374	5268
15°	5678	5114	4939
20°	5580	4832	4571
25°	5479	4539	4222
30°	5349	4227	3810
35°	5216	3921	3434
40°	5091	3588	3019
45°	4929	3262	2647
50°	4752	2915	2260
55°	4568	2543	1906
60°	4393	2162	1548
65°	4165	1770	1208
70°	3878	1338	864
75°	3469	906	684
80°	2959	630	480
85°	2219	340	250

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4929 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.1
10°-20°	140.6	3.0
20°-30°	202.5	4.3
30°-40°	228.0	4.8
40°-50°	218.1	4.6
50°-60°	178.6	3.8
60°-70°	120.4	2.6
70°-80°	60.4	1.3
80°-90°	18.4	0.4
90°-100°	81.0	1.7
100°-110°	245.1	5.2
110°-120°	417.2	8.9
120°-130°	548.9	11.7
130°-140°	617.0	13.1
140°-150°	606.5	12.9
150°-160°	510.6	10.9
160°-170°	340.0	7.2
170°-180°	119.0	2.5
0°-30°	393.7	8.4
0°-40°	621.7	13.2
0°-60°	1018.4	21.7
0°-90°	1217.7	25.9
90°-120°	743.3	15.8
90°-150°	2515.7	53.5
90°-180°	3485.0	74.1
0°-180°	4703.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	538	536	530	534	533	51
15°	513	508	496	494	491	145
25°	467	456	436	427	422	215
35°	404	388	361	342	334	253
45°	332	312	279	254	243	256
55°	252	231	194	168	160	226
65°	172	148	114	93	88	171
75°	91	70	46	42	41	97
85°	23	14	12	11	11	25
90°	1	11	24	28	30	6
95°	58	65	73	77	77	64
105°	222	224	233	233	235	238
115°	420	423	421	422	421	416
125°	615	618	616	612	608	548
135°	797	803	802	798	796	614
145°	967	969	972	971	967	604
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.8	537.8	537.8	537.8	537.8
2.5°	540.0	538.2	533.0	537.8	536.9
5°	537.8	535.6	530.4	534.3	533.4
7.5°	533.9	531.7	525.2	527.8	526.5
10°	528.6	525.6	517.7	518.2	516.0
12.5°	521.2	517.7	507.7	507.3	504.7
15°	512.9	508.1	495.9	493.8	490.7
17.5°	502.9	497.7	482.4	478.1	473.7
20°	491.6	484.6	468.0	462.3	457.1
22.5°	478.9	470.6	452.8	445.3	440.5
25°	466.7	455.8	435.7	426.6	421.8
27.5°	451.9	440.1	418.3	406.1	398.7
30°	436.6	423.5	399.1	384.3	377.3
32.5°	421.3	406.1	379.9	363.3	355.9
35°	403.9	388.2	361.2	342.4	334.5
37.5°	386.5	369.4	341.1	320.2	310.6
40°	369.9	350.7	319.7	297.0	287.0
42.5°	351.1	331.9	299.7	274.4	265.6
45°	331.9	312.3	278.7	253.9	243.4
47.5°	313.2	291.4	258.2	231.2	222.0
50°	292.2	271.7	236.4	209.4	199.3
52.5°	273.5	250.8	215.9	187.6	178.8
55°	252.1	230.7	193.7	168.4	159.6
57.5°	232.9	209.8	172.3	148.3	140.9
60°	212.9	188.9	152.7	129.1	121.7
62.5°	192.8	168.8	132.6	110.8	102.9
65°	172.3	148.3	114.3	92.9	88.1
67.5°	151.8	127.4	94.2	78.1	72.8
70°	131.7	108.2	77.6	62.4	57.6
72.5°	111.7	88.5	61.5	49.7	48.4
75°	91.2	70.2	46.2	41.9	41.0
77.5°	72.4	53.2	36.2	33.6	32.7
80°	54.5	36.6	27.5	26.2	25.3
82.5°	37.5	22.7	19.6	18.3	18.3
85°	23.1	13.5	12.2	11.3	11.3
87.5°	10.5	5.7	5.7	5.2	4.8
90°	1.0	10.9	23.7	27.7	29.6
92.5°	29.6	35.6	41.5	44.5	42.5
95°	58.3	65.2	73.1	77.1	77.1
97.5°	95.8	100.8	106.7	111.7	110.7
100°	134.4	140.3	145.3	148.2	150.2
102.5°	178.8	181.8	188.7	191.7	190.7
105°	222.3	224.3	233.2	233.2	235.2
107.5°	273.7	274.7	278.6	281.6	280.6
110°	321.1	323.1	325.1	329.0	327.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	370.5	371.5	371.5	376.5	376.5
115°	420.0	422.9	420.9	421.9	420.9
117.5°	470.3	471.3	469.4	469.4	466.4
120°	516.8	522.7	517.8	516.8	514.8
122.5°	565.2	569.2	567.2	564.2	561.3
125°	614.6	617.6	615.6	611.6	607.7
127.5°	660.1	666.0	664.0	658.1	654.1
130°	705.5	713.4	710.5	706.5	699.6
132.5°	751.0	758.9	756.9	752.0	747.0
135°	797.4	803.3	802.4	798.4	796.4
137.5°	839.9	844.8	847.8	842.9	839.9
140°	884.4	889.3	890.3	889.3	882.4
142.5°	924.9	929.8	931.8	930.8	925.9
145°	967.4	969.3	972.3	971.3	967.4
147.5°	1003.9	1007.9	1010.8	1010.8	1004.9
150°	1042.5	1044.4	1046.4	1046.4	1040.5
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)