

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: P1012433

Luminaire Tested: S123RDIP-B340D1025UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012433
REPORT IS A COMBINATION OF REPORTS P993156 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B340D1025UB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

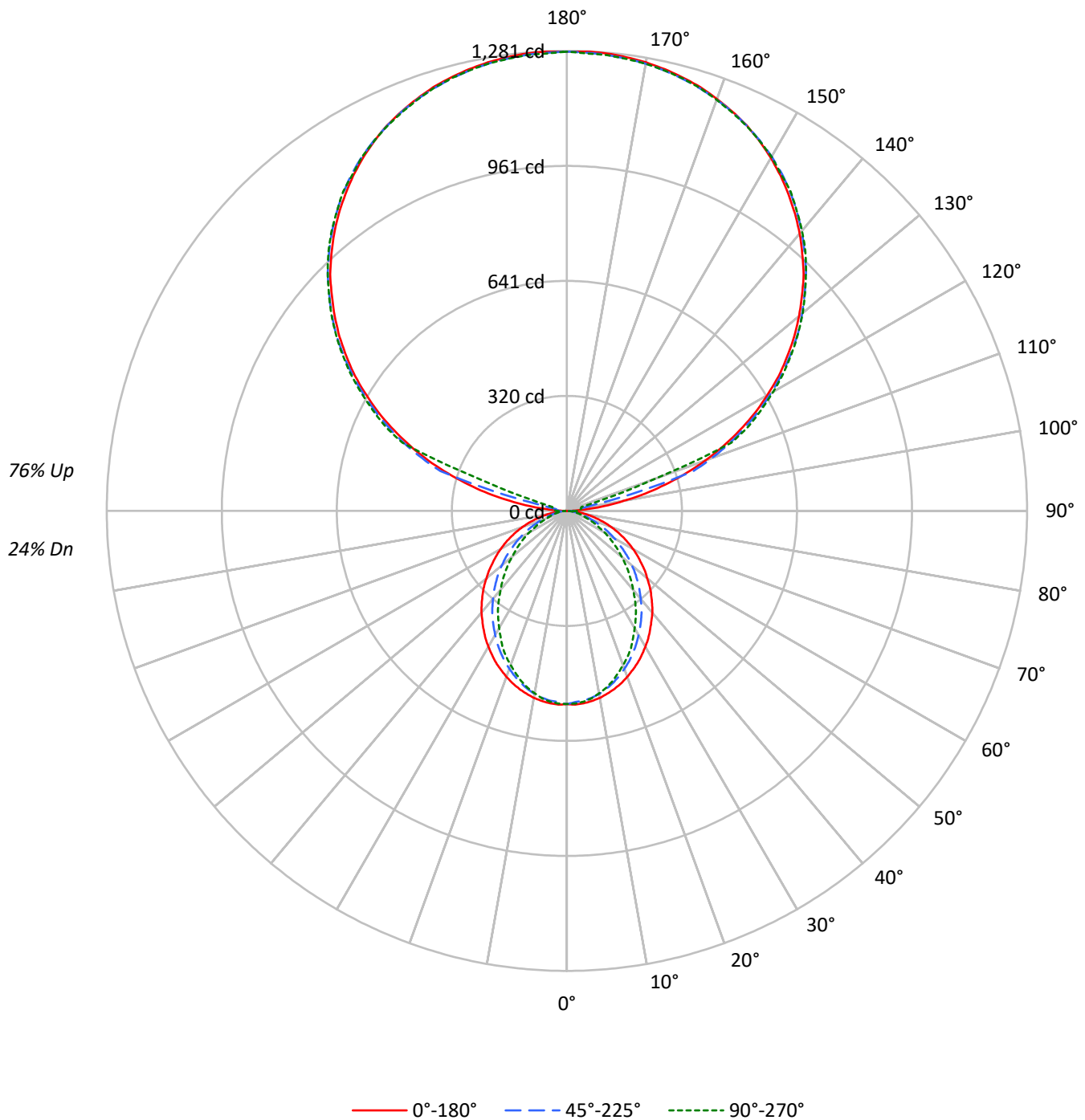
Lumens per Lamp: N/A
Luminaire Lumens: 5116.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 41.5
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	32	32	32
1	92	88	84	81	82	78	75	73	60	58	57	44	43	41	29	28	27
2	84	77	71	66	74	69	64	60	53	50	47	39	37	35	25	24	23
3	77	68	61	55	68	60	55	50	47	43	40	34	32	30	22	21	20
4	70	60	52	47	62	54	47	42	42	37	34	30	28	25	20	19	17
5	64	53	46	40	57	48	41	36	37	33	29	27	24	22	18	16	15
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11
9	47	35	28	23	42	32	26	21	25	21	17	19	16	13	13	11	10
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	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	1.0
10°-20°	140.6	2.7
20°-30°	202.5	4.0
30°-40°	228.0	4.5
40°-50°	218.1	4.3
50°-60°	178.6	3.5
60°-70°	120.4	2.4
70°-80°	60.4	1.2
80°-90°	18.3	0.4
90°-100°	45.1	0.9
100°-110°	218.0	4.3
110°-120°	534.3	10.4
120°-130°	678.2	13.3
130°-140°	724.6	14.2
140°-150°	677.5	13.2
150°-160°	546.5	10.7
160°-170°	352.7	6.9
170°-180°	121.5	2.4
0°-30°	393.7	7.7
0°-40°	621.7	12.2
0°-60°	1018.4	19.9
0°-90°	1217.6	23.8
90°-120°	797.4	15.6
90°-150°	2877.8	56.2
90°-180°	3898.0	76.2
0°-180°	5116.0	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	10	23	27	28	5
95°	58	19	30	36	36	69
105°	283	294	208	40	42	300
115°	531	537	545	555	559	524
125°	749	756	760	762	764	669
135°	932	938	942	944	942	718
145°	1076	1082	1084	1086	1086	673
155°	1185	1183	1184	1188	1183	546
165°	1249	1246	1246	1253	1246	353
175°	1279	1274	1275	1282	1274	122
180°	1279	1279	1279	1279	1279	

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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	10.5	22.8	26.6	28.5
92.5°	21.9	16.2	24.7	31.4	32.3
95°	58.0	19.0	29.5	36.1	36.1
97.5°	105.5	78.9	30.4	38.0	39.0
100°	160.6	179.6	31.4	39.0	39.9
102.5°	223.3	235.6	70.3	39.0	40.9
105°	283.1	293.6	208.1	39.9	41.8
107.5°	346.8	355.3	369.6	223.3	98.8
110°	410.4	418.0	428.5	397.1	261.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	471.2	477.9	488.3	496.9	495.0
115°	531.1	536.8	545.3	554.8	558.6
117.5°	590.0	596.6	601.4	609.0	609.9
120°	644.1	652.7	655.5	663.1	663.1
122.5°	699.2	705.9	709.7	714.4	715.4
125°	748.6	756.2	760.0	761.9	763.8
127.5°	798.0	805.6	810.4	813.2	811.3
130°	843.6	851.2	855.0	858.8	856.9
132.5°	887.4	895.0	897.8	901.6	898.8
135°	932.0	937.7	941.5	944.4	941.5
137.5°	970.0	977.6	979.5	984.3	982.4
140°	1008.0	1013.7	1016.6	1020.4	1018.5
142.5°	1043.2	1048.9	1051.7	1054.6	1051.7
145°	1075.5	1082.1	1084.0	1085.9	1085.9
147.5°	1106.8	1111.6	1113.5	1115.4	1110.6
150°	1135.3	1138.2	1140.1	1142.0	1139.1
152.5°	1161.0	1161.9	1162.9	1166.7	1161.9
155°	1184.7	1182.8	1183.8	1188.5	1182.8
157.5°	1203.7	1203.7	1202.8	1208.5	1200.9
160°	1220.8	1219.9	1218.9	1224.6	1218.0
162.5°	1237.0	1234.1	1233.2	1239.8	1234.1
165°	1249.3	1246.5	1245.5	1253.1	1246.5
167.5°	1259.8	1256.0	1256.0	1263.6	1256.0
170°	1268.3	1264.5	1264.5	1272.1	1264.5
172.5°	1274.0	1269.3	1270.2	1277.8	1269.3
175°	1278.8	1274.0	1275.0	1281.6	1274.0
177.5°	1280.7	1275.9	1276.9	1284.5	1275.0
180°	1278.8	1278.8	1278.8	1278.8	1278.8

(END OF REPORT)