

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: P1012549

Luminaire Tested: S123RDIP-B340D805UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012549
REPORT IS A COMBINATION OF REPORTS P993316 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B340D805UB50-4F0-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

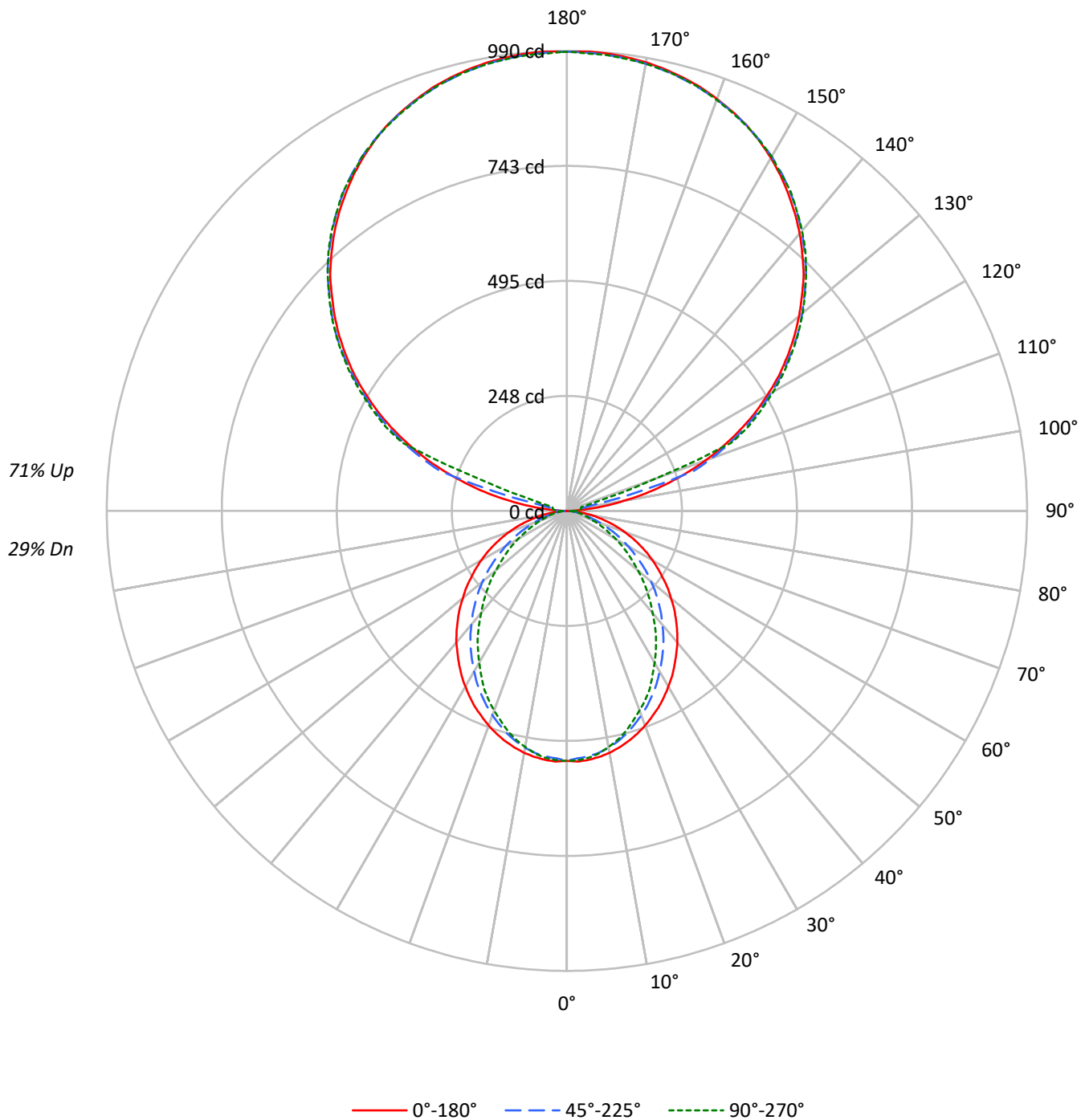
Lumens per Lamp: N/A
Luminaire Lumens: 4230.0 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31
2	85	78	72	67	76	70	65	61	55	52	49	42	39	38	29	28	27
3	78	69	62	56	69	62	56	51	49	45	41	37	34	32	26	24	23
4	71	61	53	47	63	55	48	43	43	39	35	33	30	27	23	21	20
5	65	54	46	41	58	49	42	37	39	34	30	30	26	24	21	19	17
6	60	48	41	35	54	44	37	32	35	30	26	27	23	21	19	17	15
7	55	44	36	31	49	39	33	28	32	27	23	24	21	18	17	15	14
8	51	39	32	27	46	36	29	25	29	24	21	22	19	16	16	14	12
9	48	36	29	24	43	33	26	22	26	22	18	20	17	15	15	13	11
10	44	33	26	21	40	30	24	20	24	20	16	19	15	13	14	12	10

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	1.2
10°-20°	140.6	3.3
20°-30°	202.5	4.8
30°-40°	228.0	5.4
40°-50°	218.1	5.2
50°-60°	178.6	4.2
60°-70°	120.4	2.8
70°-80°	60.4	1.4
80°-90°	17.8	0.4
90°-100°	34.9	0.8
100°-110°	168.5	4.0
110°-120°	412.9	9.8
120°-130°	524.2	12.4
130°-140°	560.0	13.2
140°-150°	523.6	12.4
150°-160°	422.4	10.0
160°-170°	272.6	6.4
170°-180°	93.9	2.2
0°-30°	393.7	9.3
0°-40°	621.7	14.7
0°-60°	1018.4	24.1
0°-90°	1217.0	28.8
90°-120°	616.3	14.6
90°-150°	2224.1	52.6
90°-180°	3013.0	71.2
0°-180°	4230.0	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	8	18	21	22	4
95°	45	15	23	28	28	54
105°	219	227	161	31	32	232
115°	410	415	422	429	432	405
125°	579	584	587	589	590	517
135°	720	725	728	730	728	555
145°	831	836	838	839	839	520
155°	916	914	915	919	914	422
165°	966	963	963	968	963	273
175°	988	985	985	990	985	94
180°	988	988	988	988	988	

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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°	0.7	8.1	17.6	20.6	22.0
92.5°	16.9	12.5	19.1	24.2	25.0
95°	44.8	14.7	22.8	27.9	27.9
97.5°	81.5	60.9	23.5	29.4	30.1
100°	124.1	138.8	24.2	30.1	30.8
102.5°	172.6	182.1	54.3	30.1	31.6
105°	218.8	226.9	160.8	30.8	32.3
107.5°	268.0	274.6	285.6	172.6	76.4
110°	317.2	323.1	331.2	306.9	201.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.2	369.3	377.4	384.0	382.6
115°	410.5	414.9	421.5	428.8	431.8
117.5°	456.0	461.1	464.8	470.7	471.4
120°	497.8	504.4	506.7	512.5	512.5
122.5°	540.4	545.6	548.5	552.2	552.9
125°	578.6	584.5	587.4	588.9	590.4
127.5°	616.8	622.7	626.3	628.5	627.1
130°	652.0	657.9	660.8	663.8	662.3
132.5°	685.8	691.7	693.9	696.8	694.6
135°	720.3	724.7	727.7	729.9	727.7
137.5°	749.7	755.6	757.0	760.7	759.2
140°	779.1	783.5	785.7	788.6	787.1
142.5°	806.2	810.6	812.8	815.0	812.8
145°	831.2	836.3	837.8	839.3	839.3
147.5°	855.4	859.1	860.6	862.0	858.4
150°	877.5	879.7	881.1	882.6	880.4
152.5°	897.3	898.0	898.8	901.7	898.0
155°	915.6	914.2	914.9	918.6	914.2
157.5°	930.3	930.3	929.6	934.0	928.1
160°	943.5	942.8	942.1	946.5	941.3
162.5°	956.0	953.8	953.1	958.2	953.8
165°	965.6	963.4	962.6	968.5	963.4
167.5°	973.7	970.7	970.7	976.6	970.7
170°	980.3	977.3	977.3	983.2	977.3
172.5°	984.7	981.0	981.7	987.6	981.0
175°	988.3	984.7	985.4	990.5	984.7
177.5°	989.8	986.1	986.9	992.7	985.4
180°	988.3	988.3	988.3	988.3	988.3

(END OF REPORT)