

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: P1012550

Luminaire Tested: S123RDIP-B340D805UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012550
REPORT IS A COMBINATION OF REPORTS P993317 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-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

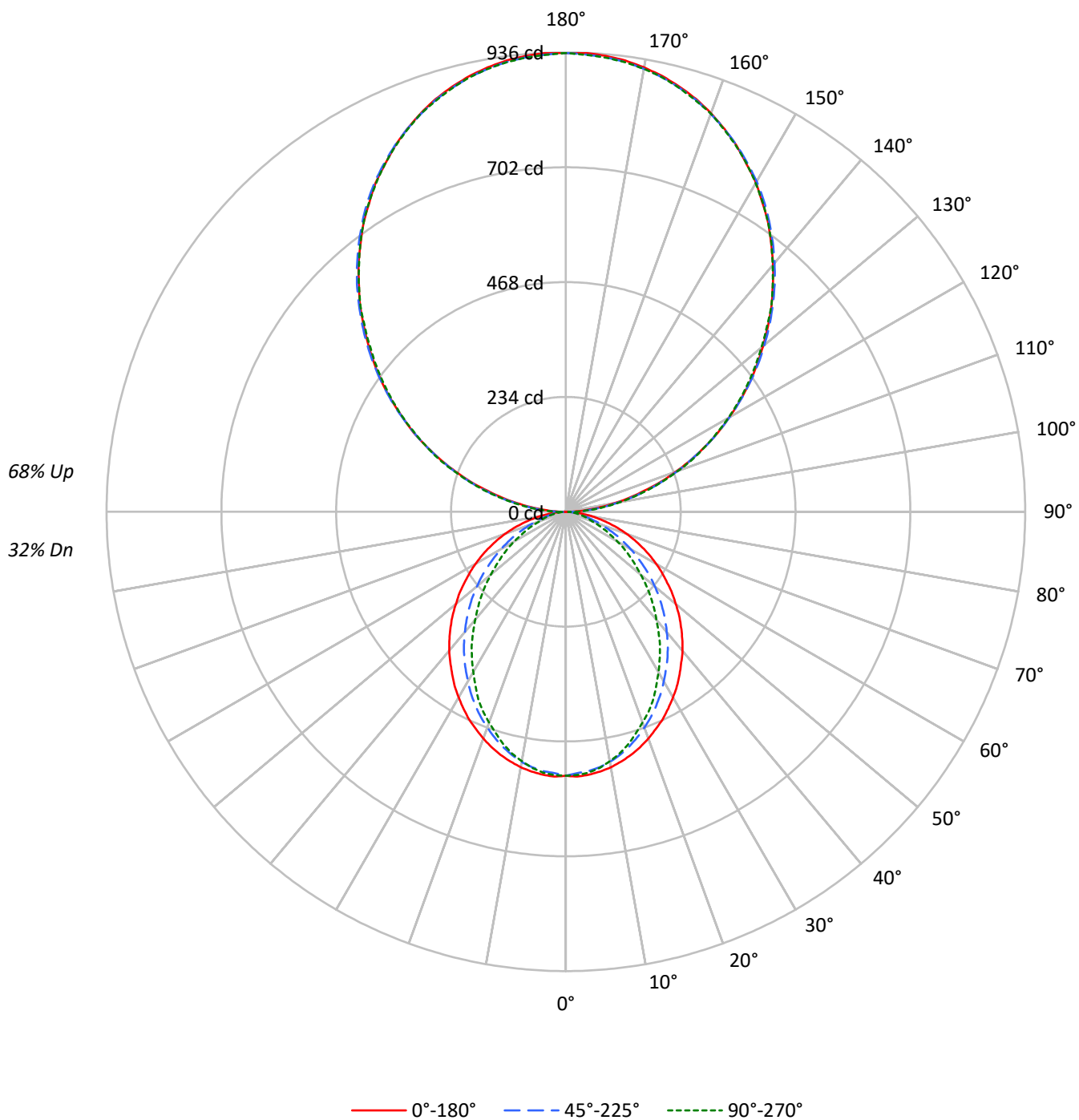
Lumens per Lamp: N/A
Luminaire Lumens: 3807.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29
3	78	69	62	57	70	63	57	52	50	46	42	39	36	33	28	26	25
4	72	61	54	48	64	56	49	44	45	40	36	34	31	29	25	23	21
5	66	55	47	41	59	49	43	38	40	35	31	31	28	25	23	20	19
6	60	49	41	36	54	44	38	33	36	31	27	28	24	22	21	18	17
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	16	15
8	52	40	33	27	47	36	30	25	30	25	21	23	20	17	17	15	13
9	48	36	29	24	43	33	27	23	27	22	19	21	18	15	16	14	12
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	13	11

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	1.3
10°-20°	140.6	3.7
20°-30°	202.5	5.3
30°-40°	228.0	6.0
40°-50°	218.1	5.7
50°-60°	178.6	4.7
60°-70°	120.4	3.2
70°-80°	60.4	1.6
80°-90°	17.8	0.5
90°-100°	60.2	1.6
100°-110°	182.1	4.8
110°-120°	310.1	8.1
120°-130°	407.9	10.7
130°-140°	458.5	12.0
140°-150°	450.7	11.8
150°-160°	379.5	10.0
160°-170°	252.6	6.6
170°-180°	88.5	2.3
0°-30°	393.7	10.3
0°-40°	621.7	16.3
0°-60°	1018.4	26.8
0°-90°	1217.0	32.0
90°-120°	552.3	14.5
90°-150°	1869.5	49.1
90°-180°	2590.0	68.0
0°-180°	3807.0	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	5
95°	43	48	54	57	57	48
105°	165	167	173	173	175	177
115°	312	314	313	314	313	309
125°	457	459	458	454	452	407
135°	593	597	596	593	592	457
145°	719	720	722	722	719	449
155°	823	823	824	827	822	379
165°	897	894	894	899	894	253
175°	932	930	930	934	929	89
180°	935	935	935	935	935	

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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°	22.0	26.4	30.8	33.0	31.6
95°	43.3	48.5	54.3	57.3	57.3
97.5°	71.2	74.9	79.3	83.0	82.2
100°	99.9	104.3	107.9	110.1	111.6
102.5°	132.9	135.1	140.2	142.5	141.7
105°	165.2	166.7	173.3	173.3	174.8
107.5°	203.4	204.1	207.1	209.3	208.5
110°	238.6	240.1	241.6	244.5	243.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	275.4	276.1	276.1	279.8	279.8
115°	312.1	314.3	312.8	313.5	312.8
117.5°	349.5	350.3	348.8	348.8	346.6
120°	384.0	388.4	384.8	384.0	382.6
122.5°	420.0	423.0	421.5	419.3	417.1
125°	456.7	458.9	457.5	454.5	451.6
127.5°	490.5	494.9	493.4	489.0	486.1
130°	524.3	530.2	528.0	525.0	519.9
132.5°	558.1	563.9	562.5	558.8	555.1
135°	592.6	597.0	596.2	593.3	591.8
137.5°	624.1	627.8	630.0	626.3	624.1
140°	657.2	660.9	661.6	660.9	655.7
142.5°	687.3	691.0	692.4	691.7	688.0
145°	718.9	720.3	722.5	721.8	718.9
147.5°	746.0	749.0	751.2	751.2	746.8
150°	774.7	776.1	777.6	777.6	773.2
152.5°	798.2	800.4	801.1	802.6	798.9
155°	823.1	823.1	823.9	826.8	821.7
157.5°	844.4	843.7	844.4	847.4	843.0
160°	864.3	862.8	862.8	866.5	863.5
162.5°	881.9	879.7	880.4	884.1	878.9
165°	896.6	894.4	894.4	898.8	893.6
167.5°	909.1	906.1	906.8	911.3	906.8
170°	919.3	916.4	916.4	921.5	916.4
172.5°	927.4	924.5	924.5	928.9	923.7
175°	932.5	929.6	929.6	934.0	928.9
177.5°	935.5	932.5	932.5	937.0	931.8
180°	934.8	934.8	934.8	934.8	934.8

(END OF REPORT)