

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: P1012696

Luminaire Tested: S123RDIP-B560D805UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012696
REPORT IS A COMBINATION OF REPORTS P993517 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B560D805UB50-4F0-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

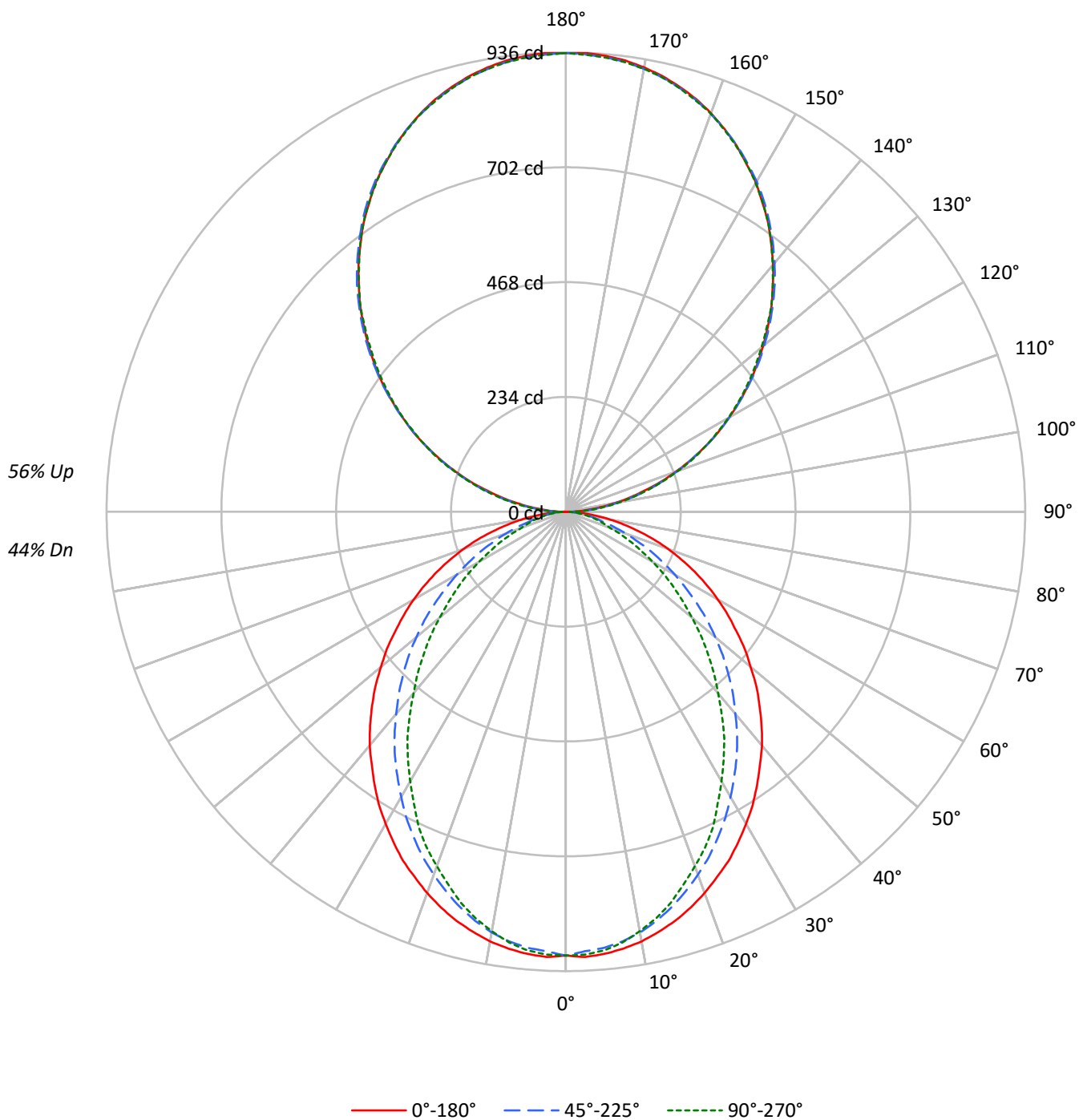
Lumens per Lamp: N/A
Luminaire Lumens: 4635.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 45.1
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	97	93	89	85	88	85	82	79	71	68	66	57	56	54	45	44	43
2	88	81	75	70	81	75	69	65	62	58	55	51	48	46	40	38	37
3	81	72	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32
4	74	63	56	50	67	58	52	47	49	44	40	40	37	34	32	30	28
5	68	57	49	43	62	52	45	40	44	39	35	36	32	29	29	26	24
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	26	24	21
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	24	21	19
8	54	42	34	29	49	39	32	27	33	28	24	27	23	20	22	19	17
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	16
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9734	9734	9734
5°	9750	9389	9364
10°	9673	9037	8858
15°	9547	8600	8305
20°	9383	8126	7685
25°	9213	7632	7099
30°	8996	7108	6406
35°	8771	6593	5774
40°	8559	6033	5077
45°	8288	5486	4450
50°	7991	4901	3801
55°	7681	4275	3206
60°	7385	3634	2602
65°	7003	2977	2032
70°	6523	2250	1451
75°	5831	1523	1149
80°	4978	1059	806
85°	3737	571	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	1.8
10°-20°	236.5	5.1
20°-30°	340.5	7.3
30°-40°	383.4	8.3
40°-50°	366.8	7.9
50°-60°	300.2	6.5
60°-70°	202.4	4.4
70°-80°	101.5	2.2
80°-90°	28.5	0.6
90°-100°	60.2	1.3
100°-110°	182.1	3.9
110°-120°	310.1	6.7
120°-130°	407.9	8.8
130°-140°	458.5	9.9
140°-150°	450.7	9.7
150°-160°	379.5	8.2
160°-170°	252.6	5.5
170°-180°	88.5	1.9
0°-30°	662.0	14.3
0°-40°	1045.4	22.6
0°-60°	1712.5	36.9
0°-90°	2045.0	44.1
90°-120°	552.3	11.9
90°-150°	1869.5	40.3
90°-180°	2590.0	55.9
0°-180°	4635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	904	901	892	898	897	86
15°	862	854	834	830	825	243
25°	785	766	733	717	709	361
35°	679	653	607	576	562	425
45°	558	525	469	427	409	431
55°	424	388	326	283	268	380
65°	290	249	192	156	148	287
75°	153	118	78	70	69	163
85°	39	23	20	19	19	43
90°	1	8	18	21	22	6
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°	904.3	904.3	904.3	904.3	904.3
2.5°	908.0	905.0	896.2	904.3	902.8
5°	904.3	900.6	891.8	898.4	897.0
7.5°	897.7	894.0	883.0	887.4	885.2
10°	888.9	883.8	870.6	871.3	867.6
12.5°	876.4	870.6	853.7	853.0	848.6
15°	862.5	854.4	833.9	830.2	825.1
17.5°	845.6	836.8	811.2	803.8	796.5
20°	826.6	814.8	787.0	777.4	768.6
22.5°	805.3	791.4	761.3	748.8	740.8
25°	784.8	766.4	732.7	717.3	709.2
27.5°	759.8	740.0	703.4	682.8	670.3
30°	734.2	712.2	671.1	646.1	634.4
32.5°	708.5	682.8	638.8	610.9	598.5
35°	679.2	652.7	607.3	575.7	562.5
37.5°	649.8	621.2	573.5	538.3	522.2
40°	621.9	589.7	537.6	499.5	482.6
42.5°	590.4	558.1	503.9	461.3	446.7
45°	558.1	525.1	468.7	426.9	409.3
47.5°	526.6	489.9	434.2	388.7	373.3
50°	491.4	456.9	397.5	352.0	335.2
52.5°	459.9	421.7	363.0	315.4	300.7
55°	423.9	388.0	325.6	283.1	268.4
57.5°	391.6	352.8	289.7	249.4	236.9
60°	357.9	317.6	256.7	217.1	204.6
62.5°	324.2	283.8	223.0	186.3	173.1
65°	289.7	249.4	192.2	156.2	148.2
67.5°	255.2	214.2	158.4	131.3	122.5
70°	221.5	181.9	130.5	104.9	96.8
72.5°	187.8	148.9	103.4	83.6	81.4
75°	153.3	118.1	77.7	70.4	68.9
77.5°	121.7	89.5	60.9	56.5	55.0
80°	91.7	61.6	46.2	44.0	42.5
82.5°	63.1	38.1	33.0	30.8	30.8
85°	38.9	22.7	20.5	19.1	19.1
87.5°	17.6	9.5	9.5	8.8	8.1
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)