

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: P1012644

Luminaire Tested: S123RDIP-B560D585UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012644
REPORT IS A COMBINATION OF REPORTS P993443 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B560D585UB27-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

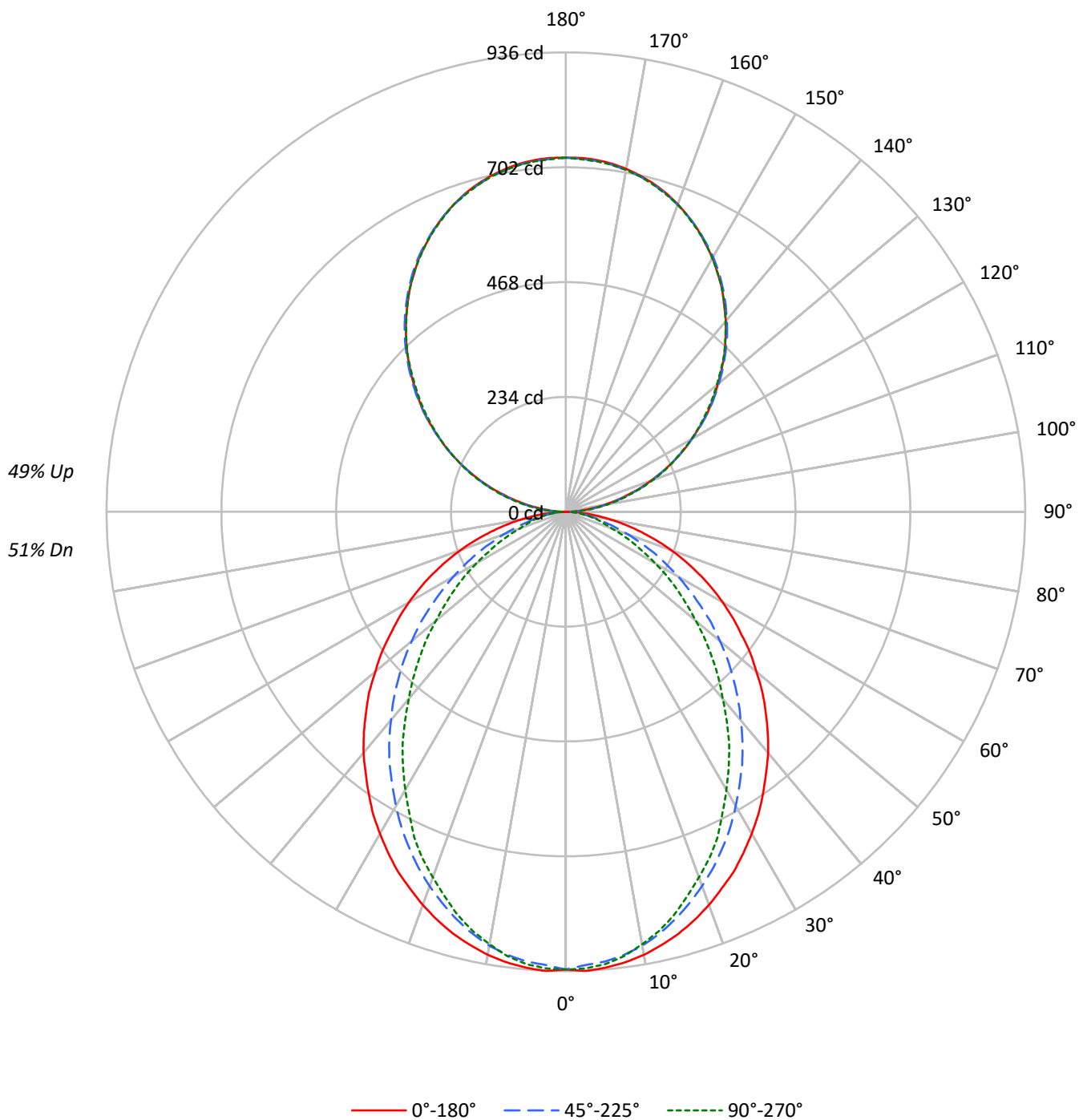
Lumens per Lamp: N/A
Luminaire Lumens: 4107.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	51
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	51	50	49	49	49	44
2	90	83	77	72	83	77	71	67	65	62	58	55	52	50	45	44	42	42	42	37
3	82	73	66	60	76	68	61	56	58	53	49	49	45	43	41	38	36	36	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	36	34	31	31	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	27	27	24
6	64	52	44	38	59	49	41	36	42	36	32	36	31	28	30	27	24	24	24	21
7	59	47	39	34	55	44	37	32	38	33	28	33	28	25	27	24	22	22	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	25	22	20	20	20	17
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	23	20	18	18	18	16
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	18	16	16	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10038	10038	10038
5°	10055	9684	9658
10°	9977	9319	9136
15°	9846	8869	8564
20°	9677	8380	7926
25°	9501	7871	7321
30°	9277	7330	6607
35°	9045	6799	5956
40°	8827	6221	5236
45°	8548	5657	4590
50°	8241	5055	3920
55°	7922	4409	3306
60°	7616	3748	2683
65°	7223	3070	2095
70°	6726	2320	1496
75°	6014	1572	1186
80°	5130	1093	833
85°	3852	590	437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8548 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	2.1
10°-20°	243.9	5.9
20°-30°	351.2	8.6
30°-40°	395.5	9.6
40°-50°	378.3	9.2
50°-60°	309.7	7.5
60°-70°	208.8	5.1
70°-80°	104.7	2.5
80°-90°	28.9	0.7
90°-100°	46.4	1.1
100°-110°	140.5	3.4
110°-120°	239.2	5.8
120°-130°	314.7	7.7
130°-140°	353.8	8.6
140°-150°	347.8	8.5
150°-160°	292.8	7.1
160°-170°	194.9	4.7
170°-180°	68.3	1.7
0°-30°	682.7	16.6
0°-40°	1078.2	26.3
0°-60°	1766.1	43.0
0°-90°	2108.5	51.3
90°-120°	426.2	10.4
90°-150°	1442.5	35.1
90°-180°	1998.0	48.6
0°-180°	4107.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	933	929	920	927	925	88
15°	890	881	860	856	851	251
25°	809	790	756	740	731	372
35°	700	673	626	594	580	438
45°	576	542	483	440	422	444
55°	437	400	336	292	277	392
65°	299	257	198	161	153	296
75°	158	122	80	73	71	168
85°	40	23	21	20	20	44
90°	1	6	14	16	17	5
95°	33	37	42	44	44	37
105°	128	129	134	134	135	136
115°	241	242	241	242	241	238
125°	352	354	353	351	348	314
135°	457	461	460	458	457	352
145°	555	556	558	557	555	346
155°	635	635	636	638	634	292
165°	692	690	690	694	690	195
175°	720	717	717	721	717	68
180°	721	721	721	721	721	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	932.6	932.6	932.6	932.6	932.6
2.5°	936.4	933.4	924.3	932.6	931.1
5°	932.6	928.9	919.8	926.6	925.1
7.5°	925.8	922.1	910.7	915.2	913.0
10°	916.8	911.5	897.8	898.6	894.8
12.5°	903.9	897.8	880.4	879.7	875.2
15°	889.5	881.2	860.0	856.2	850.9
17.5°	872.1	863.1	836.6	829.0	821.4
20°	852.5	840.4	811.6	801.8	792.7
22.5°	830.5	816.2	785.1	772.3	764.0
25°	809.3	790.4	755.6	739.8	731.4
27.5°	783.6	763.2	725.4	704.2	691.3
30°	757.2	734.5	692.1	666.4	654.3
32.5°	730.7	704.2	658.8	630.1	617.2
35°	700.4	673.2	626.3	593.8	580.2
37.5°	670.2	640.7	591.5	555.2	538.6
40°	641.4	608.1	554.4	515.1	497.7
42.5°	608.9	575.6	519.6	475.8	460.6
45°	575.6	541.6	483.3	440.2	422.1
47.5°	543.1	505.3	447.8	400.9	385.0
50°	506.8	471.2	410.0	363.1	345.7
52.5°	474.3	434.9	374.4	325.3	310.1
55°	437.2	400.1	335.8	292.0	276.8
57.5°	403.9	363.8	298.8	257.2	244.3
60°	369.1	327.5	264.7	223.9	211.0
62.5°	334.3	292.7	229.9	192.1	178.5
65°	298.8	257.2	198.2	161.1	152.8
67.5°	263.2	220.9	163.4	135.4	126.3
70°	228.4	187.6	134.6	108.2	99.8
72.5°	193.6	153.5	106.7	86.2	84.0
75°	158.1	121.8	80.2	72.6	71.1
77.5°	125.6	92.3	62.8	58.2	56.7
80°	94.5	63.5	47.7	45.4	43.9
82.5°	65.1	39.3	34.0	31.8	31.8
85°	40.1	23.4	21.2	19.7	19.7
87.5°	18.2	9.8	9.8	9.1	8.3
90°	0.6	6.2	13.6	15.9	17.0
92.5°	17.0	20.4	23.8	25.5	24.4
95°	33.4	37.4	41.9	44.2	44.2
97.5°	55.0	57.8	61.2	64.0	63.5
100°	77.1	80.5	83.3	85.0	86.1
102.5°	102.6	104.3	108.2	109.9	109.4
105°	127.5	128.6	133.7	133.7	134.8
107.5°	156.9	157.5	159.8	161.5	160.9
110°	184.1	185.3	186.4	188.7	187.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	213.0	213.0	215.9	215.9
115°	240.8	242.5	241.4	241.9	241.4
117.5°	269.7	270.3	269.1	269.1	267.4
120°	296.3	299.7	296.9	296.3	295.2
122.5°	324.1	326.4	325.2	323.5	321.8
125°	352.4	354.1	353.0	350.7	348.4
127.5°	378.5	381.9	380.7	377.3	375.1
130°	404.5	409.1	407.4	405.1	401.1
132.5°	430.6	435.1	434.0	431.2	428.3
135°	457.2	460.6	460.1	457.8	456.7
137.5°	481.6	484.4	486.1	483.3	481.6
140°	507.1	509.9	510.5	509.9	506.0
142.5°	530.3	533.2	534.3	533.7	530.9
145°	554.7	555.8	557.5	556.9	554.7
147.5°	575.6	577.9	579.6	579.6	576.2
150°	597.7	598.9	600.0	600.0	596.6
152.5°	615.9	617.6	618.1	619.3	616.4
155°	635.1	635.1	635.7	638.0	634.0
157.5°	651.6	651.0	651.6	653.8	650.4
160°	666.9	665.7	665.7	668.6	666.3
162.5°	680.5	678.8	679.3	682.2	678.2
165°	691.8	690.1	690.1	693.5	689.5
167.5°	701.4	699.2	699.7	703.1	699.7
170°	709.4	707.1	707.1	711.1	707.1
172.5°	715.6	713.3	713.3	716.7	712.8
175°	719.6	717.3	717.3	720.7	716.7
177.5°	721.8	719.6	719.6	723.0	719.0
180°	721.3	721.3	721.3	721.3	721.3

(END OF REPORT)