

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: P1012634

Luminaire Tested: S123RDIP-B560D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012634
REPORT IS A COMBINATION OF REPORTS P993431 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B560D365UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

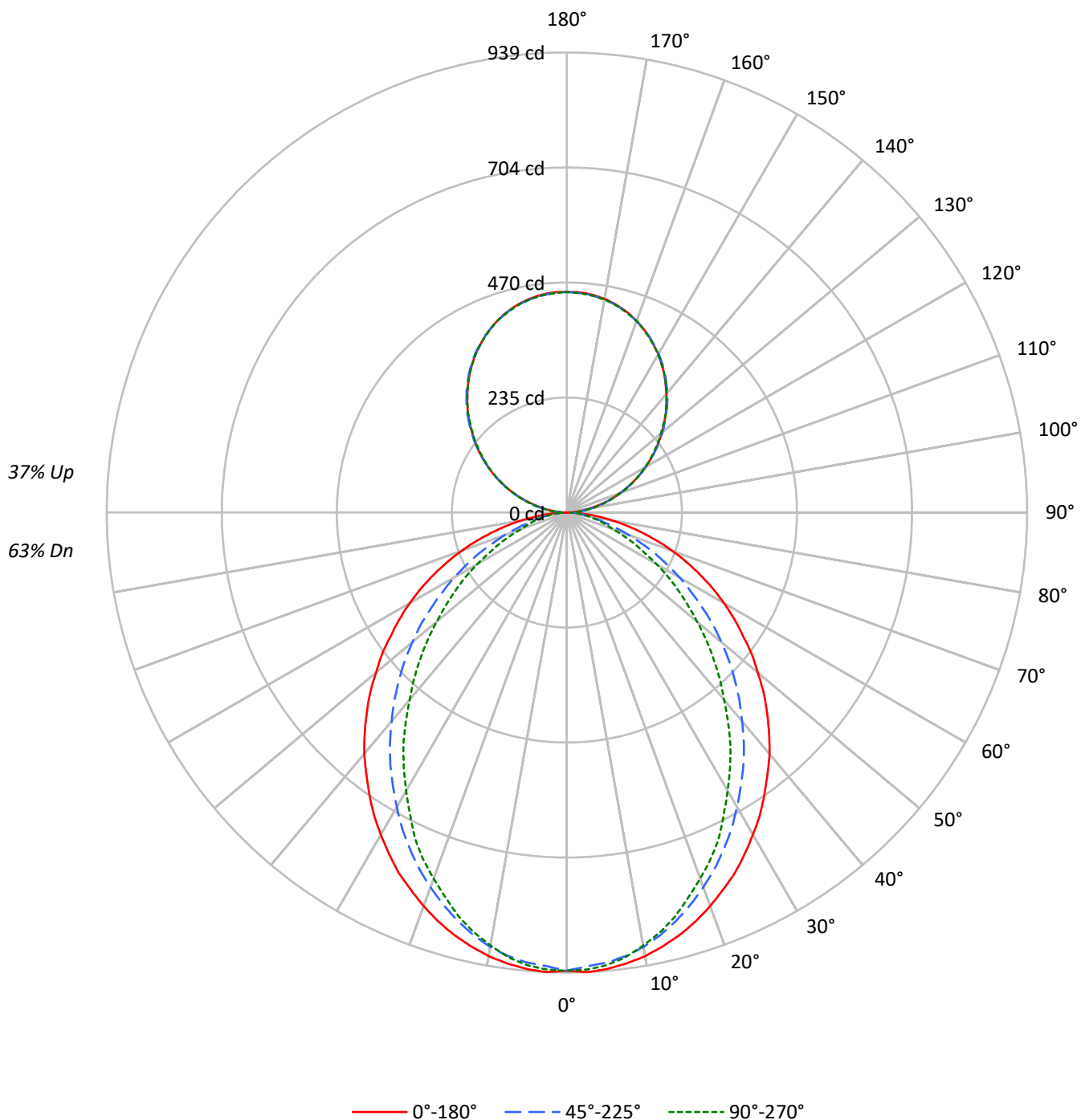
Lumens per Lamp: N/A
Luminaire Lumens: 3361.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 33.3
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68
1	101	97	93	90	95	91	88	85	80	78	75	70	68	67	61	59	58
2	92	85	79	74	86	80	75	70	71	67	63	62	59	56	54	52	50
3	85	75	68	62	79	71	64	59	63	58	53	55	51	48	48	45	43
4	78	67	59	53	73	63	56	51	56	50	46	49	45	41	43	40	37
5	71	60	52	46	67	57	49	44	50	44	40	45	40	36	39	36	33
6	66	54	46	40	62	51	44	38	46	40	35	40	36	32	36	32	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	26	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	27	23	28	24	21
10	50	38	30	25	47	36	29	25	32	27	23	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10067	10067	10067
5°	10084	9711	9685
10°	10005	9346	9162
15°	9875	8895	8589
20°	9704	8404	7949
25°	9529	7894	7342
30°	9303	7352	6625
35°	9071	6819	5972
40°	8853	6239	5251
45°	8574	5673	4603
50°	8264	5069	3932
55°	7944	4422	3316
60°	7639	3759	2691
65°	7242	3077	2100
70°	6747	2327	1501
75°	6029	1576	1190
80°	5147	1096	834
85°	3861	590	437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8574 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	2.6
10°-20°	244.6	7.3
20°-30°	352.2	10.5
30°-40°	396.6	11.8
40°-50°	379.4	11.3
50°-60°	310.5	9.2
60°-70°	209.4	6.2
70°-80°	105.0	3.1
80°-90°	28.4	0.8
90°-100°	29.0	0.9
100°-110°	87.7	2.6
110°-120°	149.3	4.4
120°-130°	196.4	5.8
130°-140°	220.7	6.6
140°-150°	217.0	6.5
150°-160°	182.7	5.4
160°-170°	121.6	3.6
170°-180°	42.6	1.3
0°-30°	684.7	20.4
0°-40°	1081.3	32.2
0°-60°	1771.2	52.7
0°-90°	2114.0	62.9
90°-120°	265.9	7.9
90°-150°	900.1	26.8
90°-180°	1247.0	37.1
0°-180°	3361.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	935	932	922	929	928	89
15°	892	884	862	859	853	251
25°	812	793	758	742	734	373
35°	702	675	628	596	582	440
45°	577	543	485	442	423	445
55°	438	401	337	293	278	393
65°	300	258	199	162	153	297
75°	158	122	80	73	71	169
85°	40	24	21	20	20	44
90°	0	4	8	10	11	4
95°	21	23	26	28	28	23
105°	80	80	83	83	84	85
115°	150	151	151	151	151	149
125°	220	221	220	219	217	196
135°	285	287	287	286	285	220
145°	346	347	348	348	346	216
155°	396	396	397	398	396	182
165°	432	431	431	433	430	122
175°	449	448	448	450	447	43
180°	450	450	450	450	450	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.3	935.3	935.3	935.3	935.3
2.5°	939.1	936.1	927.0	935.3	933.8
5°	935.3	931.5	922.4	929.2	927.7
7.5°	928.5	924.7	913.3	917.8	915.6
10°	919.4	914.1	900.4	901.2	897.4
12.5°	906.5	900.4	883.0	882.2	877.6
15°	892.1	883.7	862.5	858.7	853.4
17.5°	874.6	865.5	839.0	831.4	823.8
20°	854.9	842.8	813.9	804.1	795.0
22.5°	832.9	818.5	787.4	774.5	766.1
25°	811.7	792.7	757.8	741.9	733.5
27.5°	785.9	765.4	727.5	706.2	693.3
30°	759.3	736.6	694.1	668.3	656.1
32.5°	732.8	706.2	660.7	631.9	619.0
35°	702.4	675.1	628.1	595.5	581.8
37.5°	672.1	642.5	593.2	556.8	540.1
40°	643.3	609.9	556.0	516.6	499.1
42.5°	610.6	577.3	521.1	477.1	462.0
45°	577.3	543.1	484.7	441.5	423.3
47.5°	544.6	506.7	449.1	402.0	386.1
50°	508.2	472.6	411.1	364.1	346.7
52.5°	475.6	436.2	375.5	326.2	311.0
55°	438.4	401.3	336.8	292.8	277.6
57.5°	405.1	364.9	299.6	257.9	245.0
60°	370.2	328.5	265.5	224.5	211.6
62.5°	335.3	293.6	230.6	192.7	179.0
65°	299.6	257.9	198.7	161.6	153.2
67.5°	264.0	221.5	163.8	135.8	126.7
70°	229.1	188.1	135.0	108.5	100.1
72.5°	194.2	154.0	107.0	86.5	84.2
75°	158.5	122.1	80.4	72.8	71.3
77.5°	125.9	92.5	63.0	58.4	56.9
80°	94.8	63.7	47.8	45.5	44.0
82.5°	65.2	39.4	34.1	31.9	31.9
85°	40.2	23.5	21.2	19.7	19.7
87.5°	18.2	9.9	9.9	9.1	8.3
90°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.9	23.3	26.2	27.6	27.6
97.5°	34.3	36.1	38.2	40.0	39.6
100°	48.1	50.2	52.0	53.0	53.7
102.5°	64.0	65.1	67.5	68.6	68.2
105°	79.5	80.3	83.4	83.4	84.1
107.5°	97.9	98.3	99.7	100.8	100.4
110°	114.9	115.6	116.3	117.7	117.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	132.9	132.9	134.7	134.7
115°	150.3	151.3	150.6	151.0	150.6
117.5°	168.3	168.6	167.9	167.9	166.9
120°	184.9	187.0	185.3	184.9	184.2
122.5°	202.2	203.6	202.9	201.9	200.8
125°	219.9	221.0	220.3	218.8	217.4
127.5°	236.2	238.3	237.6	235.5	234.0
130°	252.4	255.3	254.2	252.8	250.3
132.5°	268.7	271.5	270.8	269.0	267.3
135°	285.3	287.4	287.1	285.7	285.0
137.5°	300.5	302.3	303.3	301.6	300.5
140°	316.4	318.2	318.5	318.2	315.7
142.5°	330.9	332.7	333.4	333.0	331.3
145°	346.1	346.8	347.9	347.5	346.1
147.5°	359.2	360.6	361.7	361.7	359.6
150°	373.0	373.7	374.4	374.4	372.3
152.5°	384.3	385.4	385.7	386.4	384.7
155°	396.3	396.3	396.7	398.1	395.6
157.5°	406.6	406.2	406.6	408.0	405.9
160°	416.1	415.4	415.4	417.2	415.8
162.5°	424.6	423.5	423.9	425.7	423.2
165°	431.7	430.6	430.6	432.7	430.3
167.5°	437.7	436.3	436.6	438.8	436.6
170°	442.6	441.2	441.2	443.7	441.2
172.5°	446.5	445.1	445.1	447.2	444.8
175°	449.0	447.6	447.6	449.7	447.2
177.5°	450.4	449.0	449.0	451.1	448.7
180°	450.1	450.1	450.1	450.1	450.1

(END OF REPORT)