

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: P1011806

Luminaire Tested: S123DIP-B560D365UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011806
REPORT IS A COMBINATION OF REPORTS P990094 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B560D365UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

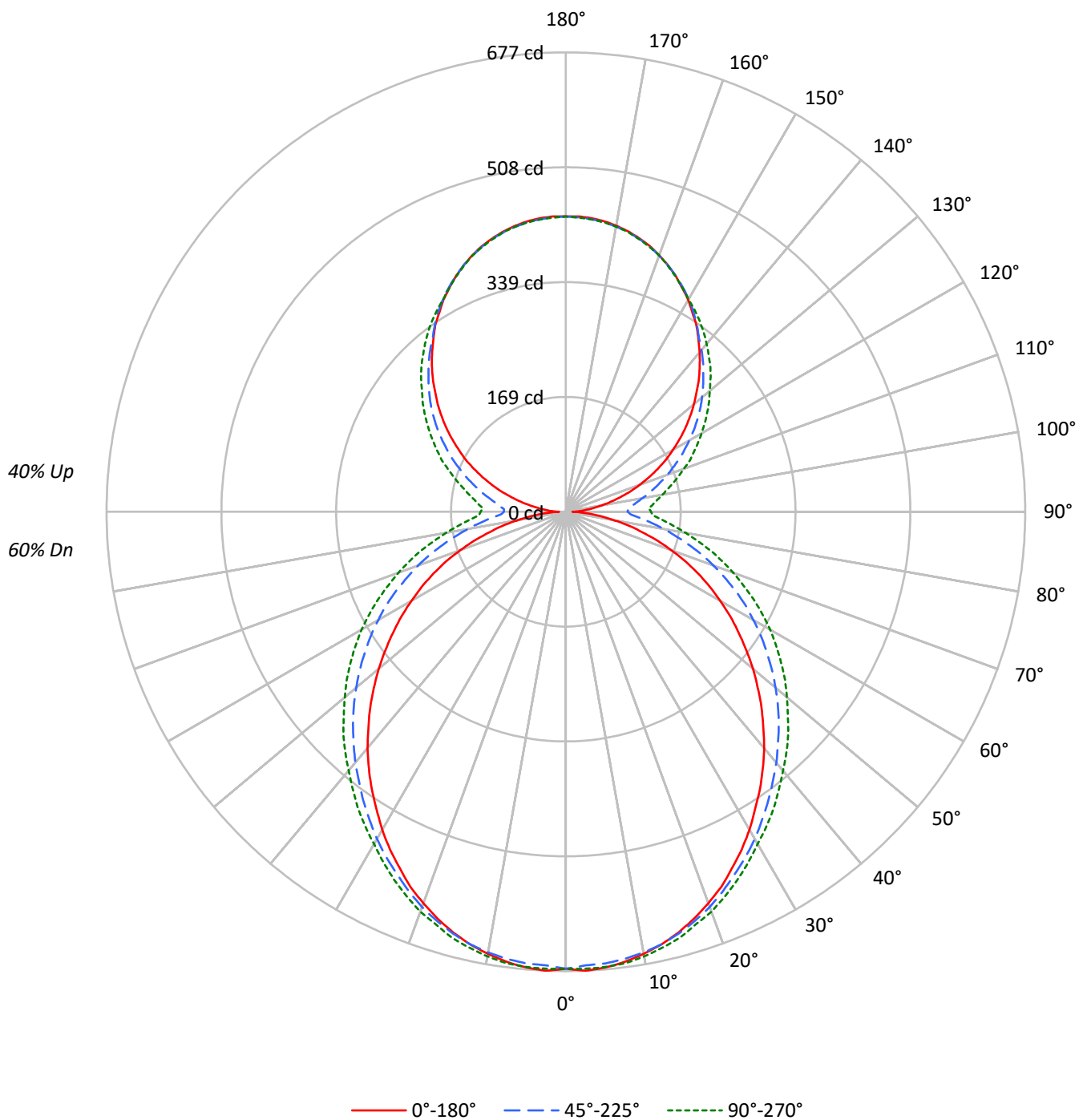
Lumens per Lamp: N/A
Luminaire Lumens: 3470.0 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1011806

CATALOG NUMBER: S123DIP-B560D365UB50-4F0-XX-W2A-D1

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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	99	94	89	85	92	88	84	80	76	73	70	65	63	61	56	54	52
2	89	81	74	69	83	76	70	65	66	61	57	57	53	50	48	46	43
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	36	38	34	31
5	68	56	47	41	63	52	44	39	46	39	35	39	35	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	24	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	27	22	19	24	20	17
10	47	34	27	22	44	32	25	21	29	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7248	7248	7248
5°	7268	7035	7030
10°	7200	6845	6793
15°	7104	6634	6541
20°	6969	6400	6270
25°	6803	6136	5991
30°	6632	5896	5710
35°	6442	5646	5482
40°	6259	5416	5239
45°	6056	5195	5041
50°	5856	4974	4824
55°	5635	4748	4626
60°	5419	4518	4422
65°	5195	4272	4183
70°	4859	3996	3937
75°	4435	3681	3684
80°	3941	3363	3395
85°	3448	3105	3187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6056 cd/sqm

TEST NUMBER: P1011806

CATALOG NUMBER: S123DIP-B560D365UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.8
10°-20°	182.1	5.2
20°-30°	272.3	7.8
30°-40°	325.1	9.4
40°-50°	340.2	9.8
50°-60°	319.2	9.2
60°-70°	266.6	7.7
70°-80°	190.7	5.5
80°-90°	114.4	3.3
90°-100°	99.3	2.9
100°-110°	137.2	4.0
110°-120°	179.4	5.2
120°-130°	209.9	6.0
130°-140°	222.5	6.4
140°-150°	211.8	6.1
150°-160°	176.7	5.1
160°-170°	117.6	3.4
170°-180°	41.2	1.2
0°-30°	518.3	14.9
0°-40°	843.4	24.3
0°-60°	1502.8	43.3
0°-90°	2074.5	59.8
90°-120°	415.9	12.0
90°-150°	1060.0	30.5
90°-180°	1396.0	40.2
0°-180°	3470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	673	668	674	673	64
15°	642	644	643	651	650	181
25°	580	587	589	598	598	267
35°	499	510	520	531	534	312
45°	408	425	444	458	464	314
55°	311	335	362	381	387	278
65°	215	244	276	298	305	212
75°	117	151	188	212	221	125
85°	36	73	112	136	144	37
90°	10	49	91	117	126	8
95°	28	59	98	122	129	29
105°	83	101	136	156	164	88
115°	149	159	185	202	208	148
125°	215	216	236	251	254	192
135°	277	279	286	298	301	214
145°	336	335	336	342	344	209
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

TEST NUMBER: P1011806

CATALOG NUMBER: S123DIP-B560D365UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	673.4	673.4	673.4	673.4	673.4
2.5°	677.0	674.8	669.0	674.8	674.1
5°	674.1	672.6	668.2	674.1	673.4
7.5°	669.0	669.0	664.6	671.9	671.2
10°	661.6	663.1	659.4	666.8	665.3
12.5°	652.8	655.0	652.8	659.4	658.0
15°	641.8	644.0	643.3	650.6	649.9
17.5°	628.6	633.0	632.3	638.9	637.4
20°	613.9	618.3	619.8	626.4	627.1
22.5°	598.5	602.9	605.1	613.9	613.2
25°	579.5	586.8	589.0	598.5	598.5
27.5°	561.1	569.2	573.6	581.7	582.4
30°	541.3	550.9	556.7	565.5	565.5
32.5°	519.3	530.3	538.4	547.9	550.1
35°	498.8	510.5	520.1	531.1	534.0
37.5°	476.8	490.0	501.0	513.5	515.7
40°	454.8	468.0	482.6	495.1	498.0
42.5°	430.6	447.4	462.8	476.8	481.2
45°	407.8	425.4	443.8	457.7	463.6
47.5°	383.6	403.4	424.0	439.4	443.8
50°	360.1	380.7	403.4	420.3	425.4
52.5°	335.2	357.2	382.9	400.5	407.1
55°	311.0	335.2	361.6	381.4	387.3
57.5°	287.5	312.5	341.1	360.9	367.5
60°	262.6	289.0	319.1	339.6	347.7
62.5°	239.1	266.3	298.5	319.1	326.4
65°	214.9	243.5	275.8	297.8	305.1
67.5°	190.7	220.8	253.1	277.3	283.1
70°	165.0	196.6	231.8	255.3	262.6
72.5°	141.6	173.1	209.8	234.0	241.3
75°	116.6	151.1	187.8	212.0	220.8
77.5°	95.4	129.8	166.5	192.2	198.8
80°	72.6	108.6	146.7	171.6	179.0
82.5°	52.8	89.5	128.4	153.3	160.6
85°	35.9	72.6	111.5	136.4	143.8
87.5°	22.0	58.7	96.1	121.0	128.4
90°	9.8	49.3	91.1	117.4	125.5
92.5°	19.1	52.6	91.4	116.6	122.5
95°	28.3	59.3	97.9	122.1	129.4
97.5°	40.5	68.6	105.1	128.8	135.9
100°	53.1	78.7	114.1	136.4	144.4
102.5°	67.8	89.3	124.7	146.3	153.3
105°	82.8	101.1	135.7	156.3	163.6
107.5°	99.8	115.6	147.0	167.9	174.1
110°	115.5	129.4	159.4	179.9	185.1

TEST NUMBER: P1011806

CATALOG NUMBER: S123DIP-B560D365UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	143.3	171.1	191.2	197.8
115°	149.0	158.8	184.6	202.5	208.0
117.5°	166.5	172.6	196.9	214.5	219.3
120°	181.7	187.5	210.0	226.5	230.9
122.5°	198.5	201.4	223.4	238.5	242.6
125°	214.9	215.9	236.5	250.6	254.3
127.5°	230.6	232.0	249.6	262.2	266.0
130°	246.3	248.4	261.9	274.6	276.6
132.5°	261.4	264.1	274.4	285.9	289.3
135°	277.4	278.7	286.4	298.3	301.3
137.5°	292.1	293.1	299.3	309.3	311.9
140°	306.7	308.4	311.0	321.6	322.9
142.5°	320.7	321.8	322.4	331.6	333.6
145°	335.5	335.4	336.5	342.0	343.6
147.5°	347.4	348.8	349.8	352.0	352.8
150°	360.7	361.4	362.1	362.1	361.6
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)