

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: P1011808

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011808
REPORT IS A COMBINATION OF REPORTS P990096 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-F
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

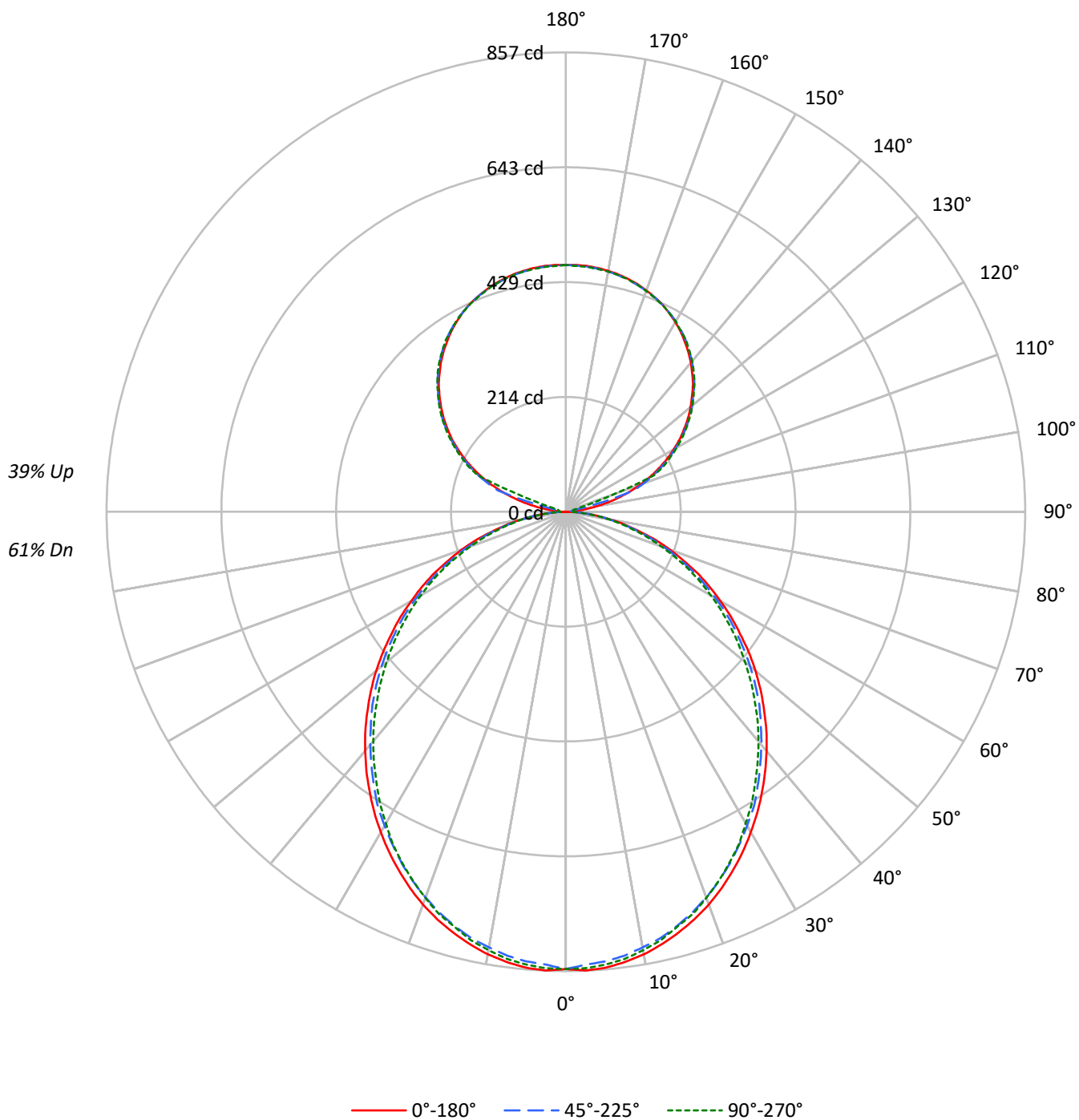
Lumens per Lamp: N/A
Luminaire Lumens: 3624.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	78	78	78	66	66	66
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	57	56
2	91	84	77	72	85	78	73	68	69	65	61	60	57	54	52	49	47
3	83	74	66	60	78	69	62	57	61	55	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	37	35
5	70	58	50	44	65	55	47	42	48	42	38	42	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	37	33	38	33	30	33	30	27
7	60	47	39	33	56	45	37	32	40	33	29	35	30	26	30	27	24
8	55	43	35	30	52	41	33	28	36	30	26	32	27	23	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9182	9182	9182
5°	9204	8865	8852
10°	9122	8564	8477
15°	8996	8253	8069
20°	8851	7906	7664
25°	8663	7541	7232
30°	8457	7162	6776
35°	8241	6776	6324
40°	8015	6370	5880
45°	7767	5975	5415
50°	7514	5535	4949
55°	7190	5075	4476
60°	6857	4569	3974
65°	6541	4021	3449
70°	6090	3413	2837
75°	5440	2703	2202
80°	4696	1900	1557
85°	3660	1022	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	2.2
10°-20°	227.1	6.3
20°-30°	335.4	9.3
30°-40°	391.7	10.8
40°-50°	393.8	10.9
50°-60°	345.9	9.5
60°-70°	257.6	7.1
70°-80°	146.6	4.0
80°-90°	42.6	1.2
90°-100°	16.2	0.4
100°-110°	78.5	2.2
110°-120°	192.3	5.3
120°-130°	244.1	6.7
130°-140°	260.8	7.2
140°-150°	243.8	6.7
150°-160°	196.7	5.4
160°-170°	126.9	3.5
170°-180°	43.7	1.2
0°-30°	642.8	17.7
0°-40°	1034.5	28.5
0°-60°	1774.1	49.0
0°-90°	2220.9	61.3
90°-120°	287.0	7.9
90°-150°	1035.7	28.6
90°-180°	1403.0	38.7
0°-180°	3624.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	854	850	842	849	848	81
15°	813	810	800	806	802	229
25°	738	734	724	725	722	340
35°	638	634	624	620	616	399
45°	523	520	510	502	498	404
55°	397	396	386	378	375	355
65°	271	267	260	254	252	267
75°	143	140	138	134	132	153
85°	38	37	37	35	35	41
90°	0	4	8	10	10	4
95°	21	7	11	13	13	25
105°	102	106	75	14	15	108
115°	191	193	196	200	201	189
125°	269	272	274	274	275	241
135°	335	338	339	340	339	258
145°	387	390	390	391	391	242
155°	426	426	426	428	426	196
165°	450	449	448	451	449	127
175°	460	458	459	461	458	44
180°	460	460	460	460	460	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.0	853.0	853.0	853.0	853.0
2.5°	856.7	853.7	845.7	853.0	852.3
5°	853.7	850.1	842.0	849.3	847.9
7.5°	847.1	843.5	835.4	842.0	841.3
10°	838.3	834.7	825.1	831.7	830.3
12.5°	826.6	823.7	814.9	819.3	818.5
15°	812.7	809.7	800.2	806.1	801.7
17.5°	797.3	793.6	784.1	788.5	787.0
20°	779.7	775.3	765.7	768.7	766.5
22.5°	759.9	755.5	745.9	748.1	745.2
25°	737.9	733.5	723.9	724.7	722.5
27.5°	715.1	710.7	700.4	701.2	699.0
30°	690.2	686.5	676.2	676.2	671.1
32.5°	665.2	660.1	652.8	647.6	645.4
35°	638.1	633.7	624.2	619.8	616.1
37.5°	611.0	605.1	595.6	590.4	588.2
40°	582.4	578.0	567.7	561.8	558.9
42.5°	553.8	548.6	538.4	532.5	529.6
45°	523.0	520.0	510.5	501.7	498.0
47.5°	492.9	488.5	479.7	470.9	467.9
50°	462.1	458.4	448.9	440.8	436.4
52.5°	429.8	427.6	417.3	410.7	406.3
55°	396.8	396.1	386.5	378.5	374.8
57.5°	366.0	363.1	355.7	348.4	344.0
60°	332.3	331.5	322.7	316.1	312.5
62.5°	302.2	300.0	291.2	284.6	282.4
65°	270.6	267.0	259.6	253.8	251.6
67.5°	236.9	234.0	228.1	223.0	220.0
70°	206.8	202.4	198.0	192.9	189.2
72.5°	175.3	172.4	167.2	162.8	161.4
75°	143.0	140.1	137.9	134.2	132.0
77.5°	114.4	113.0	110.0	107.1	107.1
80°	86.5	84.3	82.9	82.1	82.1
82.5°	59.4	59.4	59.4	57.9	57.2
85°	38.1	36.7	36.7	35.2	35.2
87.5°	19.1	16.9	16.1	15.4	15.4
90°	0.3	3.8	8.2	9.6	10.3
92.5°	7.9	5.8	8.9	11.3	11.6
95°	20.9	6.8	10.6	13.0	13.0
97.5°	38.0	28.4	10.9	13.7	14.0
100°	57.8	64.6	11.3	14.0	14.4
102.5°	80.4	84.8	25.3	14.0	14.7
105°	101.9	105.7	74.9	14.4	15.0
107.5°	124.8	127.9	133.0	80.4	35.6
110°	147.7	150.4	154.2	142.9	94.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.6	172.0	175.8	178.8	178.1
115°	191.1	193.2	196.3	199.7	201.1
117.5°	212.3	214.7	216.4	219.2	219.5
120°	231.8	234.9	235.9	238.7	238.7
122.5°	251.7	254.1	255.4	257.1	257.5
125°	269.4	272.2	273.5	274.2	274.9
127.5°	287.2	290.0	291.7	292.7	292.0
130°	303.6	306.4	307.7	309.1	308.4
132.5°	319.4	322.1	323.1	324.5	323.5
135°	335.4	337.5	338.9	339.9	338.9
137.5°	349.1	351.8	352.5	354.2	353.6
140°	362.8	364.8	365.9	367.2	366.6
142.5°	375.4	377.5	378.5	379.5	378.5
145°	387.1	389.5	390.1	390.8	390.8
147.5°	398.4	400.1	400.7	401.4	399.7
150°	408.6	409.6	410.3	411.0	410.0
152.5°	417.8	418.2	418.5	419.9	418.2
155°	426.4	425.7	426.0	427.8	425.7
157.5°	433.2	433.2	432.9	434.9	432.2
160°	439.4	439.0	438.7	440.7	438.4
162.5°	445.2	444.2	443.8	446.2	444.2
165°	449.6	448.6	448.3	451.0	448.6
167.5°	453.4	452.0	452.0	454.8	452.0
170°	456.5	455.1	455.1	457.8	455.1
172.5°	458.5	456.8	457.2	459.9	456.8
175°	460.2	458.5	458.9	461.3	458.5
177.5°	460.9	459.2	459.6	462.3	458.9
180°	460.2	460.2	460.2	460.2	460.2

(END OF REPORT)