

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: P1011810

Luminaire Tested: S123DIP-B560D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011810
REPORT IS A COMBINATION OF REPORTS P990098 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-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

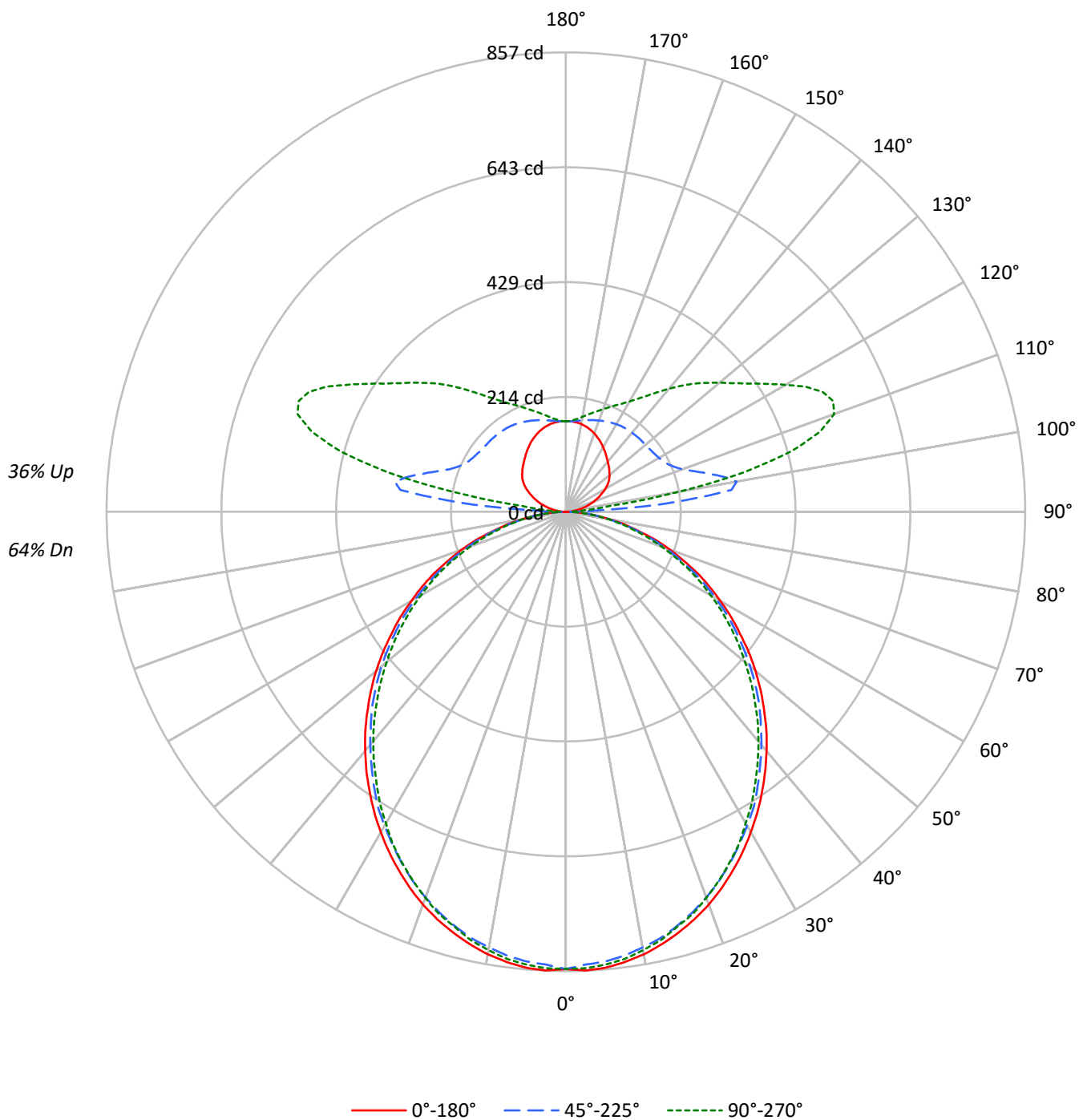
Lumens per Lamp: N/A
Luminaire Lumens: 3494.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	104	104	104	104	91	91	91	79	79	79	69	69	69
1	101	96	92	89	94	91	87	84	80	77	75	70	68	66	61	59	58
2	92	84	78	72	86	79	74	69	70	65	62	61	58	55	53	51	49
3	84	74	66	60	78	70	63	57	62	56	52	54	50	47	47	44	41
4	77	65	57	51	72	62	54	49	55	49	44	48	44	40	42	39	36
5	70	58	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31
6	65	52	44	38	61	50	42	37	44	38	33	39	34	30	34	30	27
7	60	47	39	34	56	45	37	32	40	34	30	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18

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	2.3
10°-20°	227.1	6.5
20°-30°	335.4	9.6
30°-40°	391.7	11.2
40°-50°	393.8	11.3
50°-60°	345.9	9.9
60°-70°	257.6	7.4
70°-80°	146.6	4.2
80°-90°	42.6	1.2
90°-100°	95.9	2.7
100°-110°	268.2	7.7
110°-120°	261.5	7.5
120°-130°	208.2	6.0
130°-140°	164.4	4.7
140°-150°	122.6	3.5
150°-160°	85.5	2.4
160°-170°	50.3	1.4
170°-180°	16.3	0.5
0°-30°	642.8	18.4
0°-40°	1034.5	29.6
0°-60°	1774.1	50.8
0°-90°	2220.9	63.6
90°-120°	625.6	17.9
90°-150°	1120.9	32.1
90°-180°	1273.0	36.4
0°-180°	3494.0	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°	1	4	8	10	10	4
95°	12	38	203	59	40	12
105°	40	59	275	481	435	42
115°	70	87	210	461	529	69
125°	97	115	196	356	417	87
135°	114	136	194	293	338	88
145°	130	149	191	240	264	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

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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°	0.7	4.1	8.5	9.6	9.9
92.5°	5.1	20.5	63.6	21.7	18.1
95°	11.6	37.8	202.7	59.2	39.6
97.5°	18.5	43.2	311.7	148.7	81.3
100°	25.3	47.6	323.7	311.0	214.3
102.5°	32.5	52.8	301.5	416.4	339.4
105°	39.6	58.6	274.8	480.6	434.8
107.5°	47.2	65.4	251.2	508.8	497.0
110°	55.4	72.4	231.7	509.6	532.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.9	79.8	218.7	490.3	539.7
115°	70.1	87.3	210.2	460.9	528.7
117.5°	77.2	94.5	204.4	429.4	504.8
120°	84.8	101.7	200.6	399.8	473.4
122.5°	91.3	108.5	198.2	376.3	444.0
125°	97.4	115.0	196.2	355.5	417.0
127.5°	102.2	121.2	195.2	338.4	393.7
130°	106.6	126.6	194.1	322.6	374.6
132.5°	110.1	131.6	193.8	308.0	355.8
135°	114.2	136.2	193.5	292.8	338.0
137.5°	117.9	140.0	192.8	278.4	319.2
140°	121.7	143.4	192.4	264.4	299.4
142.5°	125.8	146.4	191.7	251.6	281.0
145°	130.2	149.2	191.1	240.2	264.2
147.5°	134.7	152.1	190.0	231.2	249.8
150°	139.1	154.5	188.7	223.4	237.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)