

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: P1011851

Luminaire Tested: S123DIP-B560D585UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011851
REPORT IS A COMBINATION OF REPORTS P990157 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B560D585UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

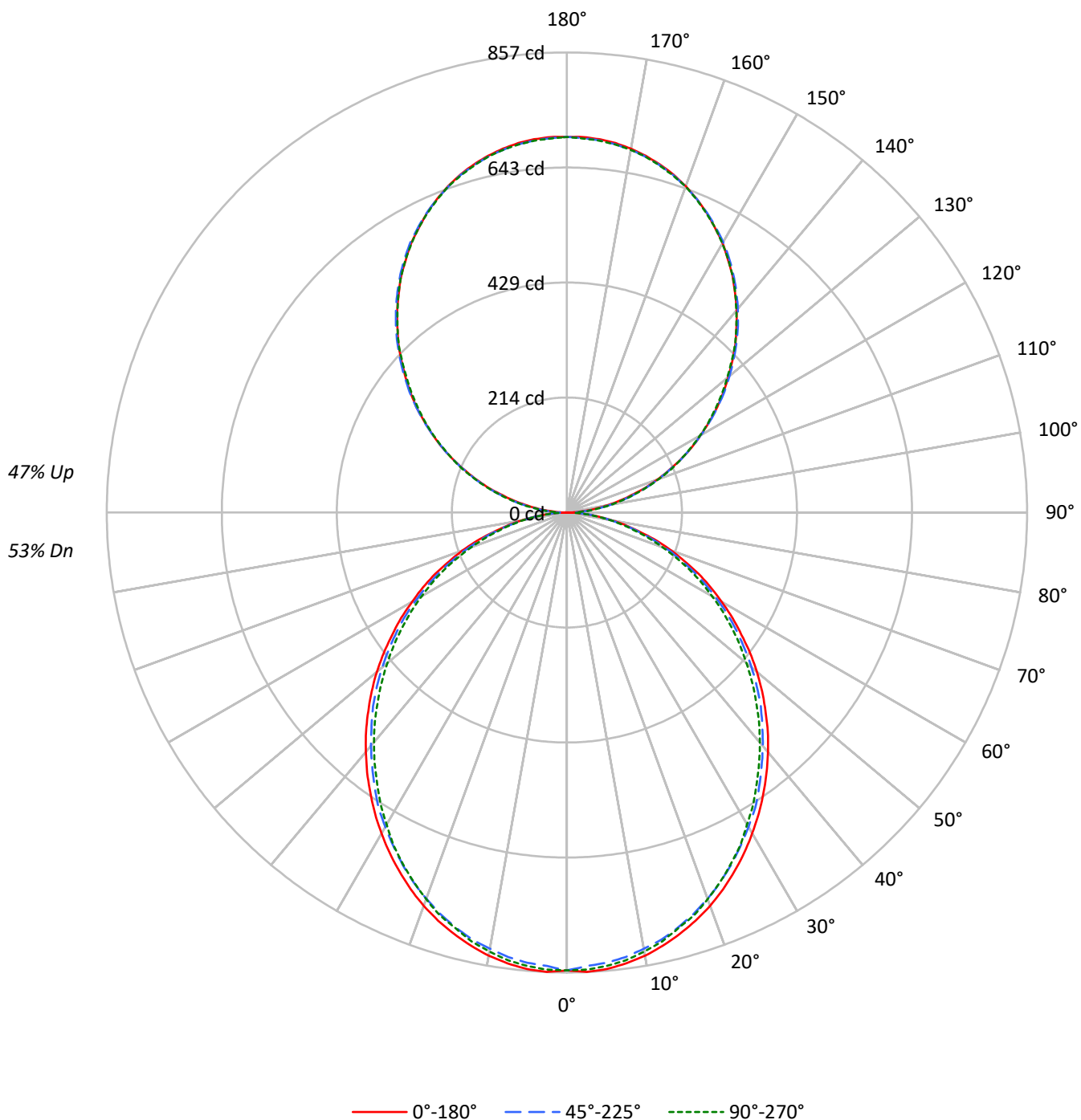
Lumens per Lamp: N/A
Luminaire Lumens: 4160.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59
1	98	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	59	52	47	51	46	41	44	39	36	36	33	31
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	24
7	59	46	38	32	54	43	36	31	37	32	27	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	22	25	21	19
9	51	38	31	26	47	36	29	24	31	26	22	27	23	19	23	20	17
10	47	35	28	23	44	33	26	22	29	23	20	25	21	18	21	18	15

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	1.9
10°-20°	227.1	5.5
20°-30°	335.4	8.1
30°-40°	391.7	9.4
40°-50°	393.8	9.5
50°-60°	345.9	8.3
60°-70°	257.6	6.2
70°-80°	146.6	3.5
80°-90°	43.1	1.0
90°-100°	45.0	1.1
100°-110°	136.3	3.3
110°-120°	232.1	5.6
120°-130°	305.3	7.3
130°-140°	343.2	8.2
140°-150°	337.4	8.1
150°-160°	284.0	6.8
160°-170°	189.1	4.5
170°-180°	66.2	1.6
0°-30°	642.8	15.5
0°-40°	1034.5	24.9
0°-60°	1774.1	42.6
0°-90°	2221.5	53.4
90°-120°	413.4	9.9
90°-150°	1399.2	33.6
90°-180°	1939.0	46.6
0°-180°	4160.0	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	6	13	15	16	5
95°	32	36	41	43	43	36
105°	124	125	130	130	131	132
115°	234	235	234	235	234	231
125°	342	344	342	340	338	305
135°	444	447	446	444	443	342
145°	538	539	541	540	538	336
155°	616	616	617	619	615	284
165°	671	669	669	673	669	189
175°	698	696	696	699	695	66
180°	700	700	700	700	700	

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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°	0.5	6.0	13.2	15.4	16.5
92.5°	16.5	19.8	23.1	24.7	23.6
95°	32.4	36.3	40.7	42.9	42.9
97.5°	53.3	56.1	59.4	62.1	61.6
100°	74.7	78.0	80.8	82.4	83.5
102.5°	99.5	101.1	105.0	106.6	106.1
105°	123.7	124.8	129.7	129.7	130.8
107.5°	152.2	152.8	155.0	156.6	156.1
110°	178.6	179.7	180.8	183.0	181.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.1	206.6	206.6	209.4	209.4
115°	233.6	235.2	234.1	234.7	234.1
117.5°	261.6	262.2	261.1	261.1	259.4
120°	287.4	290.7	288.0	287.4	286.3
122.5°	314.4	316.6	315.5	313.8	312.2
125°	341.8	343.5	342.4	340.2	338.0
127.5°	367.1	370.4	369.3	366.0	363.8
130°	392.4	396.8	395.2	393.0	389.1
132.5°	417.7	422.1	421.0	418.2	415.5
135°	443.5	446.8	446.3	444.1	443.0
137.5°	467.1	469.9	471.5	468.8	467.1
140°	491.9	494.6	495.2	494.6	490.8
142.5°	514.4	517.2	518.3	517.7	515.0
145°	538.0	539.1	540.8	540.2	538.0
147.5°	558.4	560.6	562.2	562.2	558.9
150°	579.8	580.9	582.0	582.0	578.7
152.5°	597.4	599.0	599.6	600.7	597.9
155°	616.1	616.1	616.6	618.8	615.0
157.5°	632.0	631.5	632.0	634.2	630.9
160°	646.9	645.8	645.8	648.5	646.3
162.5°	660.1	658.4	659.0	661.7	657.9
165°	671.0	669.4	669.4	672.7	668.8
167.5°	680.4	678.2	678.7	682.0	678.7
170°	688.1	685.9	685.9	689.7	685.9
172.5°	694.1	691.9	691.9	695.2	691.4
175°	698.0	695.8	695.8	699.1	695.2
177.5°	700.2	698.0	698.0	701.3	697.4
180°	699.6	699.6	699.6	699.6	699.6

(END OF REPORT)