

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: P1011849

Luminaire Tested: S123DIP-B560D585UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011849
REPORT IS A COMBINATION OF REPORTS P990155 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-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

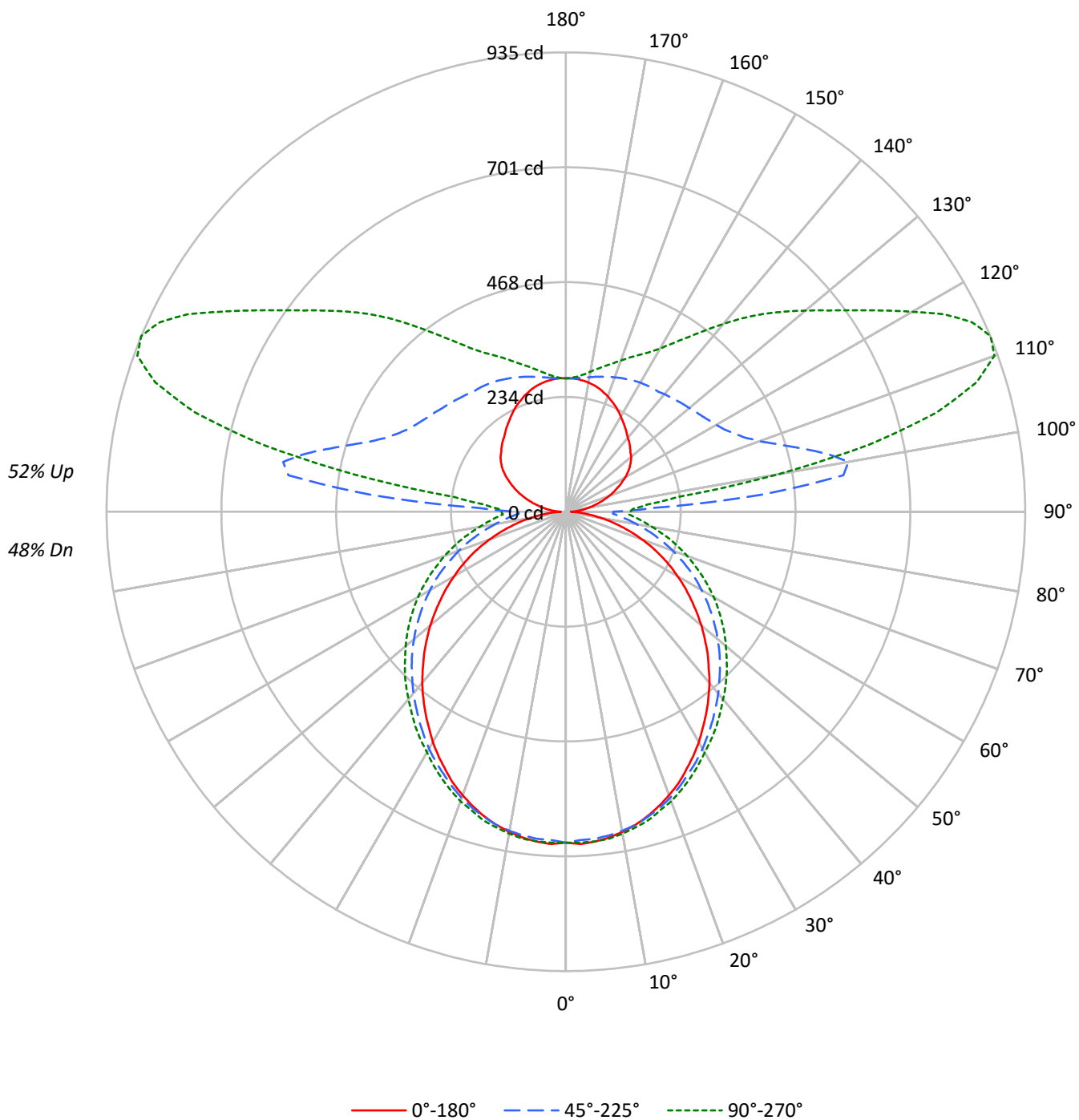
Lumens per Lamp: N/A
Luminaire Lumens: 4311.8 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	44	44	44
1	96	92	87	83	88	84	81	77	71	68	65	58	56	54	46	45	44	38	37	36
2	87	79	73	67	80	73	67	63	61	57	53	50	47	45	40	38	36	31	30	29
3	79	69	62	56	73	64	57	52	54	49	44	44	40	37	35	33	30	26	25	24
4	72	61	53	47	66	57	49	44	48	42	38	39	35	32	31	28	26	22	21	20
5	66	54	46	40	61	50	43	37	42	37	32	35	31	27	28	25	22	19	18	17
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20	17	16	15
7	56	44	36	30	52	41	33	28	34	29	25	29	24	21	23	20	17	15	14	13
8	52	40	32	26	48	37	30	25	31	26	22	26	22	19	21	18	15	13	12	11
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	16	14	12	11	10
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	13	11	10	9

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.5
10°-20°	182.1	4.2
20°-30°	272.3	6.3
30°-40°	325.1	7.5
40°-50°	340.2	7.9
50°-60°	319.2	7.4
60°-70°	266.6	6.2
70°-80°	190.7	4.4
80°-90°	115.0	2.7
90°-100°	225.6	5.2
100°-110°	483.7	11.2
110°-120°	455.6	10.6
120°-130°	354.8	8.2
130°-140°	273.3	6.3
140°-150°	199.1	4.6
150°-160°	137.6	3.2
160°-170°	80.8	1.9
170°-180°	26.3	0.6
0°-30°	518.3	12.0
0°-40°	843.4	19.6
0°-60°	1502.8	34.9
0°-90°	2075.0	48.1
90°-120°	1164.8	27.0
90°-150°	1992.0	46.2
90°-180°	2237.0	51.9
0°-180°	4311.8	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°	11	52	97	123	131	8
95°	27	97	398	190	166	26
105°	70	118	497	848	781	74
115°	116	153	377	798	913	115
125°	159	187	339	611	715	141
135°	185	220	320	493	569	143
145°	210	240	307	392	434	132
155°	238	257	297	338	352	109
165°	260	267	285	302	307	73
175°	271	271	273	277	276	26
180°	272	272	272	272	272	

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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°	10.6	52.0	96.6	123.2	131.1
92.5°	17.0	73.2	179.2	136.1	136.9
95°	26.8	97.4	398.5	190.5	166.5
97.5°	37.0	103.2	569.5	329.3	228.4
100°	47.3	106.8	584.3	585.3	437.0
102.5°	58.1	111.3	544.2	749.8	633.1
105°	69.7	117.8	496.9	848.4	781.4
107.5°	81.0	125.8	454.6	888.6	876.2
110°	93.4	134.1	419.6	885.6	928.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.5	143.0	394.3	849.4	935.4
115°	116.4	153.0	376.9	797.8	912.6
117.5°	127.9	161.5	363.2	742.8	869.7
120°	139.2	170.2	353.5	690.6	814.1
122.5°	149.7	178.9	345.9	648.5	762.4
125°	158.9	187.1	339.0	610.6	714.6
127.5°	166.5	196.4	333.7	578.6	672.8
130°	173.7	205.2	328.3	549.0	636.9
132.5°	178.5	213.2	324.2	521.0	603.0
135°	185.1	219.8	319.9	492.8	569.3
137.5°	191.1	225.8	315.9	465.3	534.7
140°	196.4	231.3	312.4	439.0	499.1
142.5°	203.0	235.6	308.4	414.0	465.0
145°	210.1	239.9	307.3	392.0	433.7
147.5°	216.6	244.6	305.6	374.0	406.9
150°	223.7	248.4	303.4	359.2	383.5
152.5°	230.9	252.6	300.7	348.2	365.5
155°	238.0	256.6	297.4	338.0	352.3
157.5°	243.5	260.2	294.6	328.2	339.7
160°	250.1	263.2	291.3	319.1	327.6
162.5°	255.0	265.5	288.0	310.5	316.6
165°	260.0	267.4	284.7	302.0	307.3
167.5°	263.8	269.0	281.4	294.6	297.9
170°	267.1	269.8	278.1	288.0	289.7
172.5°	269.3	270.7	275.4	282.2	282.0
175°	271.0	271.2	273.2	277.0	276.5
177.5°	272.1	271.5	271.5	273.7	272.6
180°	271.5	271.5	271.5	271.5	271.5

(END OF REPORT)