

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: P1011890

Luminaire Tested: S123DIP-B560D805UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011890
REPORT IS A COMBINATION OF REPORTS P990214 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B560D805UB50-4F0-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

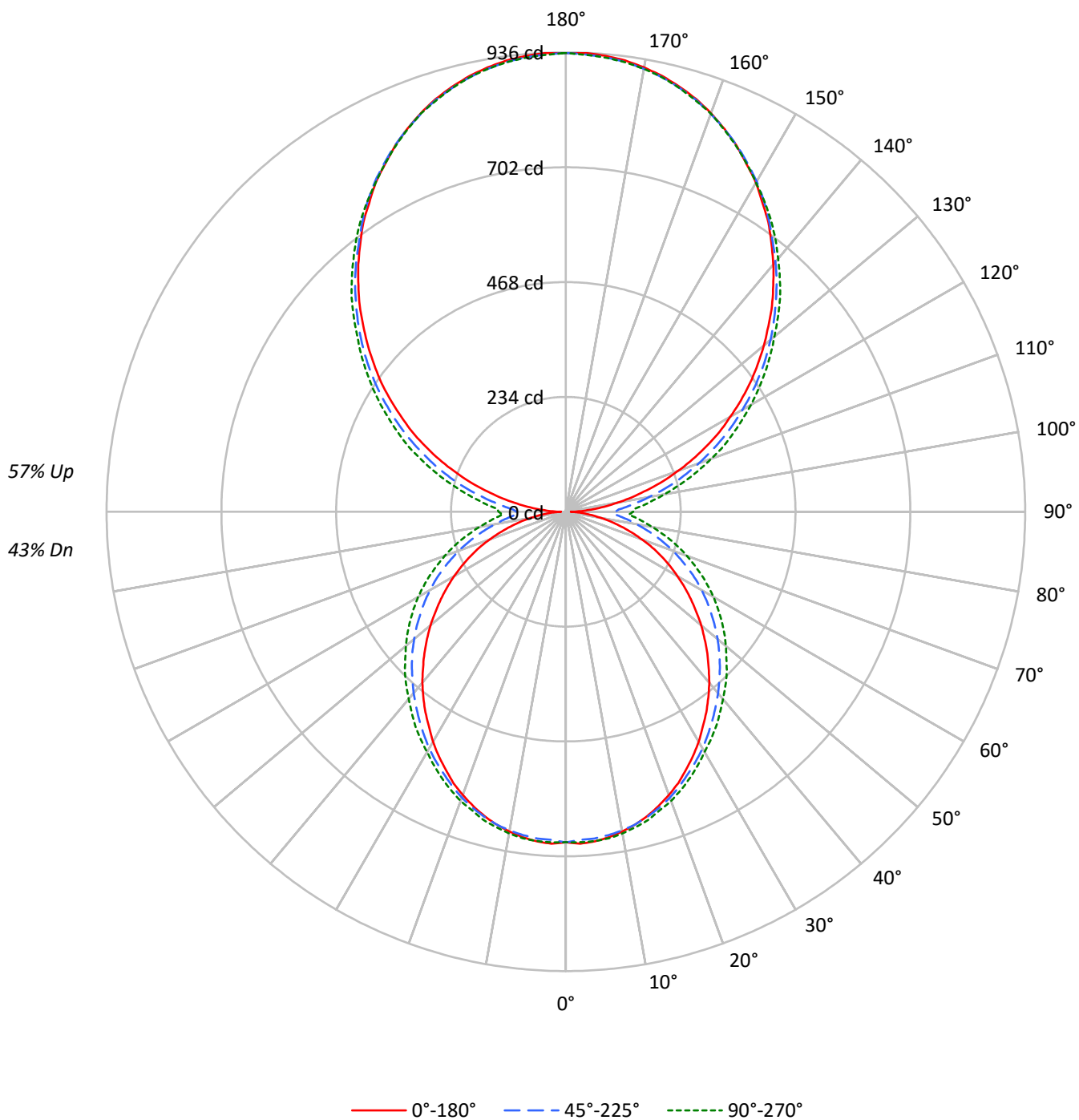
Lumens per Lamp: N/A
Luminaire Lumens: 4855.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 45.1
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	95	91	86	83	87	83	79	76	68	66	63	55	53	51	42	41	40
2	86	79	72	67	78	72	66	62	59	55	52	47	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11

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	1.3
10°-20°	182.1	3.8
20°-30°	272.3	5.6
30°-40°	325.1	6.7
40°-50°	340.2	7.0
50°-60°	319.2	6.6
60°-70°	266.6	5.5
70°-80°	190.7	3.9
80°-90°	115.4	2.4
90°-100°	131.4	2.7
100°-110°	234.5	4.8
110°-120°	345.0	7.1
120°-130°	427.9	8.8
130°-140°	467.4	9.6
140°-150°	452.6	9.3
150°-160°	379.5	7.8
160°-170°	252.6	5.2
170°-180°	88.5	1.8
0°-30°	518.3	10.7
0°-40°	843.4	17.4
0°-60°	1502.8	31.0
0°-90°	2075.5	42.7
90°-120°	711.0	14.6
90°-150°	2058.9	42.4
90°-180°	2780.0	57.3
0°-180°	4855.0	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	54	100	128	137	10
95°	51	85	127	153	160	54
105°	171	190	228	249	257	183
115°	316	327	352	370	375	313
125°	459	461	481	493	496	410
135°	594	598	605	615	618	458
145°	720	720	722	728	728	449
155°	823	823	824	827	822	379
165°	897	894	894	899	894	253
175°	932	930	930	934	929	89
180°	935	935	935	935	935	

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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°	10.2	53.6	100.5	128.4	137.2
92.5°	30.8	66.7	107.8	134.2	139.4
95°	51.4	85.2	126.9	152.7	160.0
97.5°	78.5	108.6	147.5	173.2	179.8
100°	106.5	134.4	171.7	195.2	204.0
102.5°	138.8	161.5	199.6	222.5	229.0
105°	171.1	190.2	228.3	248.9	257.0
107.5°	208.5	224.6	257.7	279.7	285.5
110°	243.0	257.7	288.5	310.5	314.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	279.8	290.8	318.6	340.7	347.3
115°	315.8	326.8	351.7	370.0	375.1
117.5°	353.2	359.8	383.3	400.9	404.5
120°	386.9	395.0	415.6	431.7	435.4
122.5°	422.9	427.4	448.6	462.6	465.5
125°	458.9	461.1	481.0	493.4	495.6
127.5°	492.7	496.4	513.2	523.5	525.7
130°	526.5	531.7	544.1	555.1	554.4
132.5°	559.6	565.4	575.0	584.5	585.9
135°	594.1	597.7	605.0	615.3	617.5
137.5°	625.6	628.5	635.9	643.9	645.4
140°	657.9	661.6	664.5	674.8	673.3
142.5°	688.0	691.0	692.4	701.2	701.2
145°	719.6	720.3	722.5	727.7	727.7
147.5°	746.0	749.0	751.2	753.4	751.9
150°	774.7	776.1	777.6	777.6	774.7
152.5°	798.2	800.4	801.1	802.6	798.9
155°	823.1	823.1	823.9	826.8	821.7
157.5°	844.4	843.7	844.4	847.4	843.0
160°	864.3	862.8	862.8	866.5	863.5
162.5°	881.9	879.7	880.4	884.1	878.9
165°	896.6	894.4	894.4	898.8	893.6
167.5°	909.1	906.1	906.8	911.3	906.8
170°	919.3	916.4	916.4	921.5	916.4
172.5°	927.4	924.5	924.5	928.9	923.7
175°	932.5	929.6	929.6	934.0	928.9
177.5°	935.5	932.5	932.5	937.0	931.8
180°	934.8	934.8	934.8	934.8	934.8

(END OF REPORT)