

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: P1011889

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011889
REPORT IS A COMBINATION OF REPORTS P990213 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-D
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

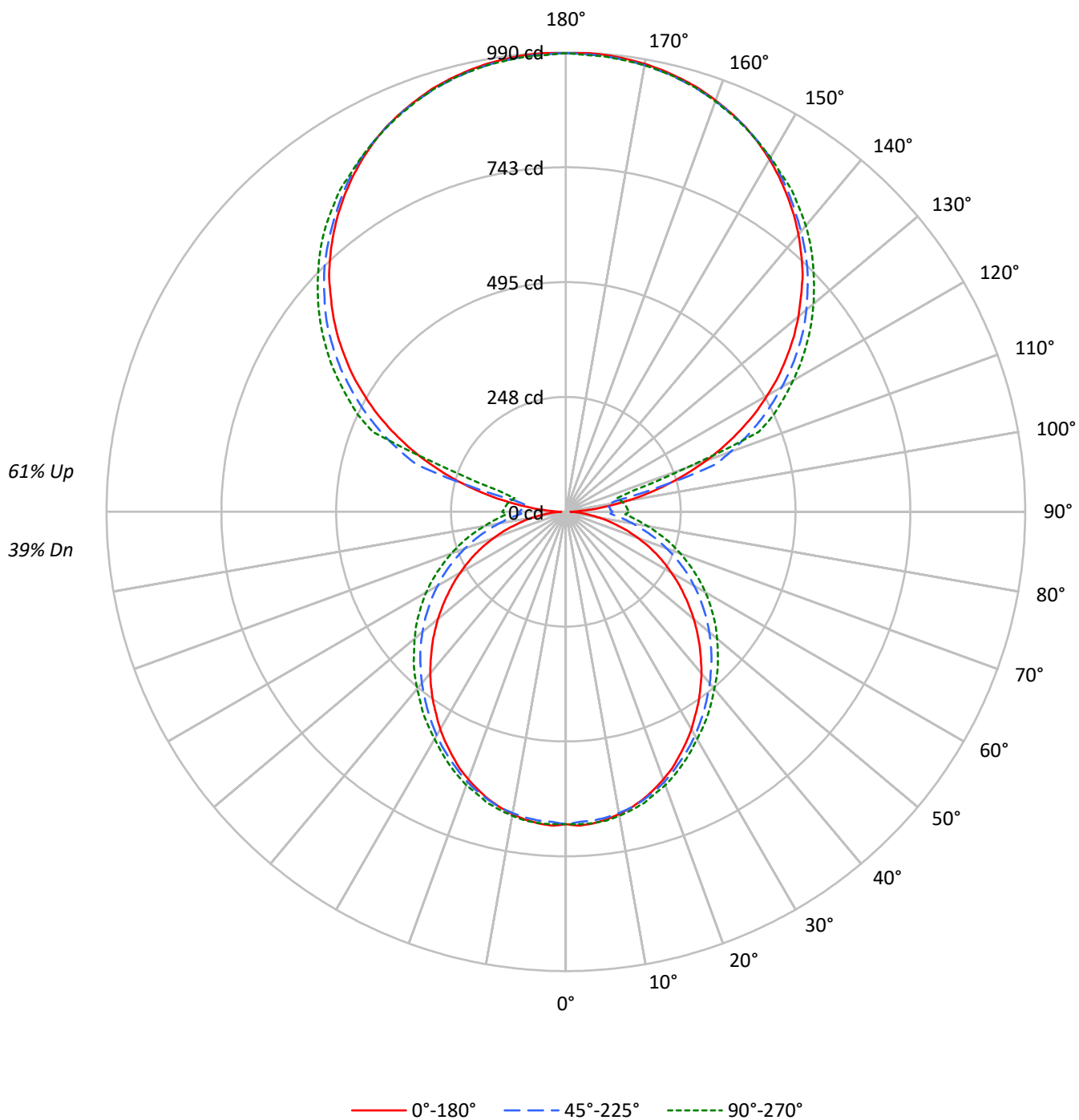
Lumens per Lamp: N/A
Luminaire Lumens: 5278.0 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	82	86	82	78	75	67	64	62	53	51	49	40	38	37
2	86	78	72	66	78	71	66	61	58	54	50	46	43	40	34	33	31
3	78	68	61	55	70	62	56	50	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	37	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	29	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	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	1.2
10°-20°	182.1	3.5
20°-30°	272.3	5.2
30°-40°	325.1	6.2
40°-50°	340.2	6.4
50°-60°	319.2	6.0
60°-70°	266.6	5.1
70°-80°	190.7	3.6
80°-90°	115.4	2.2
90°-100°	106.1	2.0
100°-110°	220.9	4.2
110°-120°	447.9	8.5
120°-130°	544.2	10.3
130°-140°	568.9	10.8
140°-150°	525.5	10.0
150°-160°	422.4	8.0
160°-170°	272.6	5.2
170°-180°	93.9	1.8
0°-30°	518.3	9.8
0°-40°	843.4	16.0
0°-60°	1502.8	28.5
0°-90°	2075.5	39.3
90°-120°	775.0	14.7
90°-150°	2413.6	45.7
90°-180°	3202.0	60.7
0°-180°	5278.0	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	9
95°	53	51	95	123	131	60
105°	225	250	216	106	114	238
115°	414	427	460	485	494	409
125°	581	587	611	628	634	519
135°	722	725	736	752	753	556
145°	832	836	838	845	848	521
155°	916	914	915	919	914	422
165°	966	963	963	968	963	273
175°	988	985	985	990	985	94
180°	988	988	988	988	988	

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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°	25.7	52.8	96.1	125.4	132.8
95°	52.9	51.4	95.4	123.3	130.6
97.5°	88.8	94.6	91.7	119.6	127.7
100°	130.7	168.9	88.0	115.2	123.2
102.5°	178.5	208.5	113.7	110.1	118.9
105°	224.7	250.4	215.8	106.4	114.5
107.5°	273.1	295.1	336.2	243.0	153.4
110°	321.6	340.7	378.1	372.9	273.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	368.6	384.0	419.9	444.9	450.1
115°	414.2	427.4	460.4	485.3	494.1
117.5°	459.7	470.6	499.3	522.8	529.3
120°	500.7	511.0	537.5	560.2	565.3
122.5°	543.3	550.0	575.6	595.5	601.3
125°	580.8	586.7	610.9	627.8	634.4
127.5°	619.0	624.2	646.1	663.0	666.7
130°	654.2	659.4	676.9	693.9	696.8
132.5°	687.3	693.2	706.4	722.5	725.4
135°	721.8	725.4	736.5	751.9	753.4
137.5°	751.2	756.3	762.9	778.3	780.5
140°	779.8	784.2	788.6	802.5	804.7
142.5°	806.9	810.6	812.8	824.5	826.0
145°	831.9	836.3	837.8	845.2	848.1
147.5°	855.4	859.1	860.6	864.2	863.5
150°	877.5	879.7	881.1	882.6	881.9
152.5°	897.3	898.0	898.8	901.7	898.0
155°	915.6	914.2	914.9	918.6	914.2
157.5°	930.3	930.3	929.6	934.0	928.1
160°	943.5	942.8	942.1	946.5	941.3
162.5°	956.0	953.8	953.1	958.2	953.8
165°	965.6	963.4	962.6	968.5	963.4
167.5°	973.7	970.7	970.7	976.6	970.7
170°	980.3	977.3	977.3	983.2	977.3
172.5°	984.7	981.0	981.7	987.6	981.0
175°	988.3	984.7	985.4	990.5	984.7
177.5°	989.8	986.1	986.9	992.7	985.4
180°	988.3	988.3	988.3	988.3	988.3

(END OF REPORT)