

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: P1011891

Luminaire Tested: S123DIP-B560D805UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011891
REPORT IS A COMBINATION OF REPORTS P990215 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-D4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

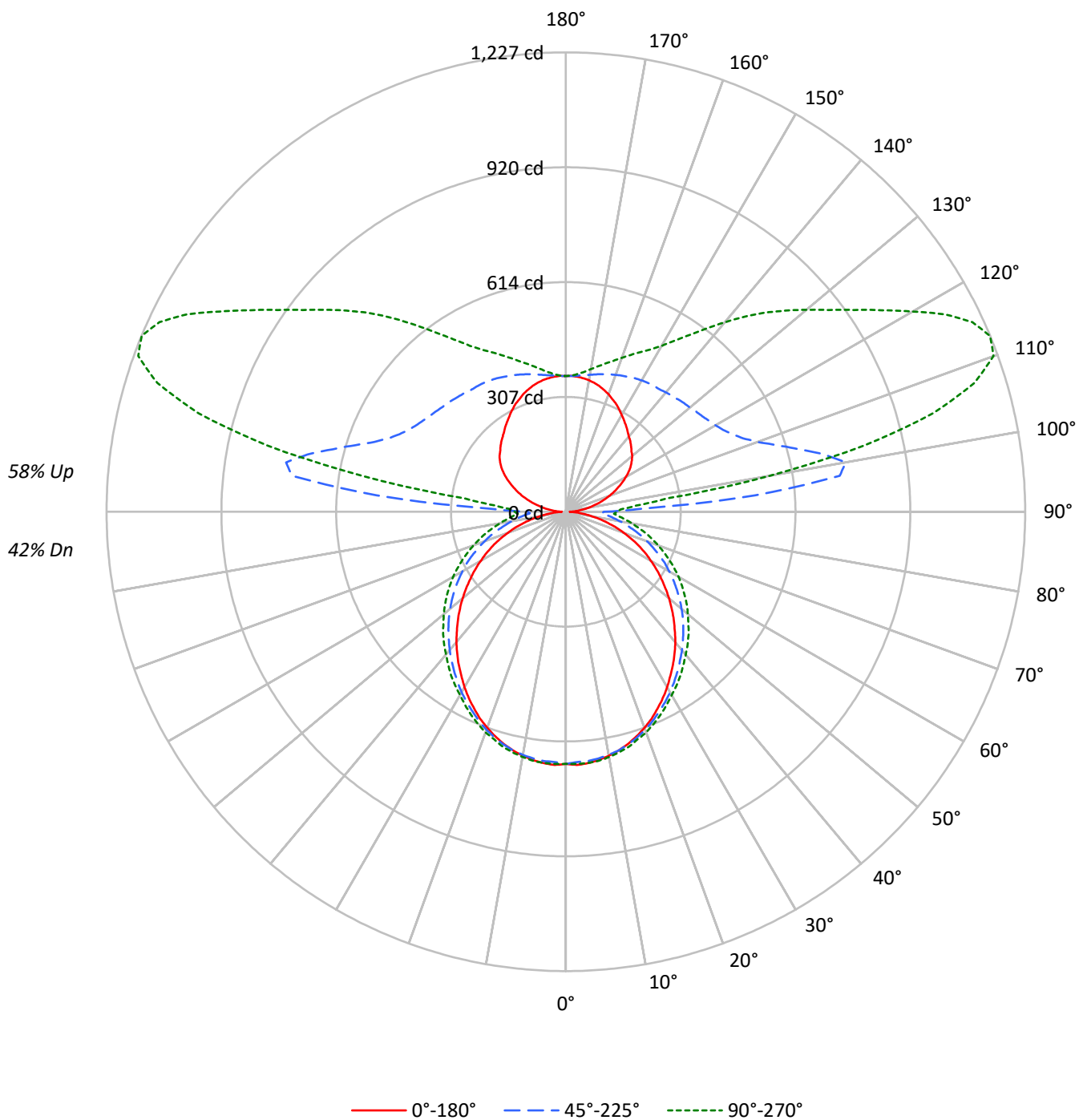
Lumens per Lamp: N/A
Luminaire Lumens: 4999.4 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	63	63	63	48	48	48
1	95	90	86	82	86	82	79	76	68	65	63	54	52	50	41	40	39
2	86	78	72	67	78	72	66	61	59	55	51	47	44	41	36	34	32
3	78	69	61	55	71	63	56	51	51	47	43	41	38	35	31	29	27
4	72	60	52	46	65	55	48	43	46	40	36	36	33	29	28	25	23
5	66	54	45	39	59	49	42	36	41	35	31	33	29	25	25	22	20
6	60	48	40	34	55	44	37	32	36	31	27	29	25	22	23	20	17
7	56	43	35	30	50	40	33	28	33	27	23	27	22	19	21	18	15
8	52	39	31	26	47	36	29	24	30	25	21	24	20	17	19	16	14
9	48	36	28	23	44	33	26	22	27	22	18	22	18	15	17	15	12
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	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	1.3
10°-20°	182.1	3.6
20°-30°	272.3	5.4
30°-40°	325.1	6.5
40°-50°	340.2	6.8
50°-60°	319.2	6.4
60°-70°	266.6	5.3
70°-80°	190.7	3.8
80°-90°	115.5	2.3
90°-100°	277.4	5.5
100°-110°	628.4	12.6
110°-120°	596.7	11.9
120°-130°	467.2	9.3
130°-140°	362.0	7.2
140°-150°	265.3	5.3
150°-160°	183.8	3.7
160°-170°	107.9	2.2
170°-180°	35.1	0.7
0°-30°	518.3	10.4
0°-40°	843.4	16.9
0°-60°	1502.8	30.1
0°-90°	2075.6	41.5
90°-120°	1502.5	30.1
90°-150°	2597.0	51.9
90°-180°	2924.0	58.5
0°-180°	4999.4	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	54	101	128	136	9
95°	33	118	508	222	188	33
105°	91	149	645	1108	1016	96
115°	154	200	490	1046	1198	153
125°	211	249	445	802	940	188
135°	247	293	424	651	752	191
145°	280	320	410	522	576	176
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

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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°	11.0	54.3	101.3	128.4	136.5
92.5°	19.8	84.4	213.5	147.8	146.7
95°	33.1	117.8	507.9	222.4	187.9
97.5°	46.9	126.6	737.7	409.6	272.3
100°	60.9	132.5	759.0	753.2	552.7
102.5°	75.6	139.8	706.9	974.6	816.3
105°	91.1	149.4	645.2	1107.8	1016.0
107.5°	106.4	161.0	590.2	1163.2	1144.4
110°	123.3	173.2	544.6	1160.6	1215.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.5	186.1	512.3	1114.0	1226.7
115°	154.2	200.1	490.4	1046.5	1198.0
117.5°	169.6	212.5	473.5	974.6	1142.2
120°	185.0	225.0	461.7	906.2	1069.6
122.5°	198.9	237.5	452.9	851.6	1002.0
125°	211.4	249.2	444.9	802.4	939.6
127.5°	221.7	261.8	439.0	761.3	885.3
130°	231.3	273.5	433.1	723.2	839.1
132.5°	237.9	284.2	428.8	687.2	795.0
135°	246.7	293.2	424.3	650.8	751.8
137.5°	254.8	301.3	420.0	615.6	707.0
140°	262.1	308.7	416.2	581.8	660.7
142.5°	270.9	314.6	411.9	549.8	616.7
145°	280.4	320.4	410.4	521.6	576.3
147.5°	289.2	326.6	408.2	498.8	541.8
150°	298.8	331.8	405.2	479.8	511.7
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)