

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: P1011801

Luminaire Tested: S123DIP-B560D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011801
REPORT IS A COMBINATION OF REPORTS P990089 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B560D365UB40-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

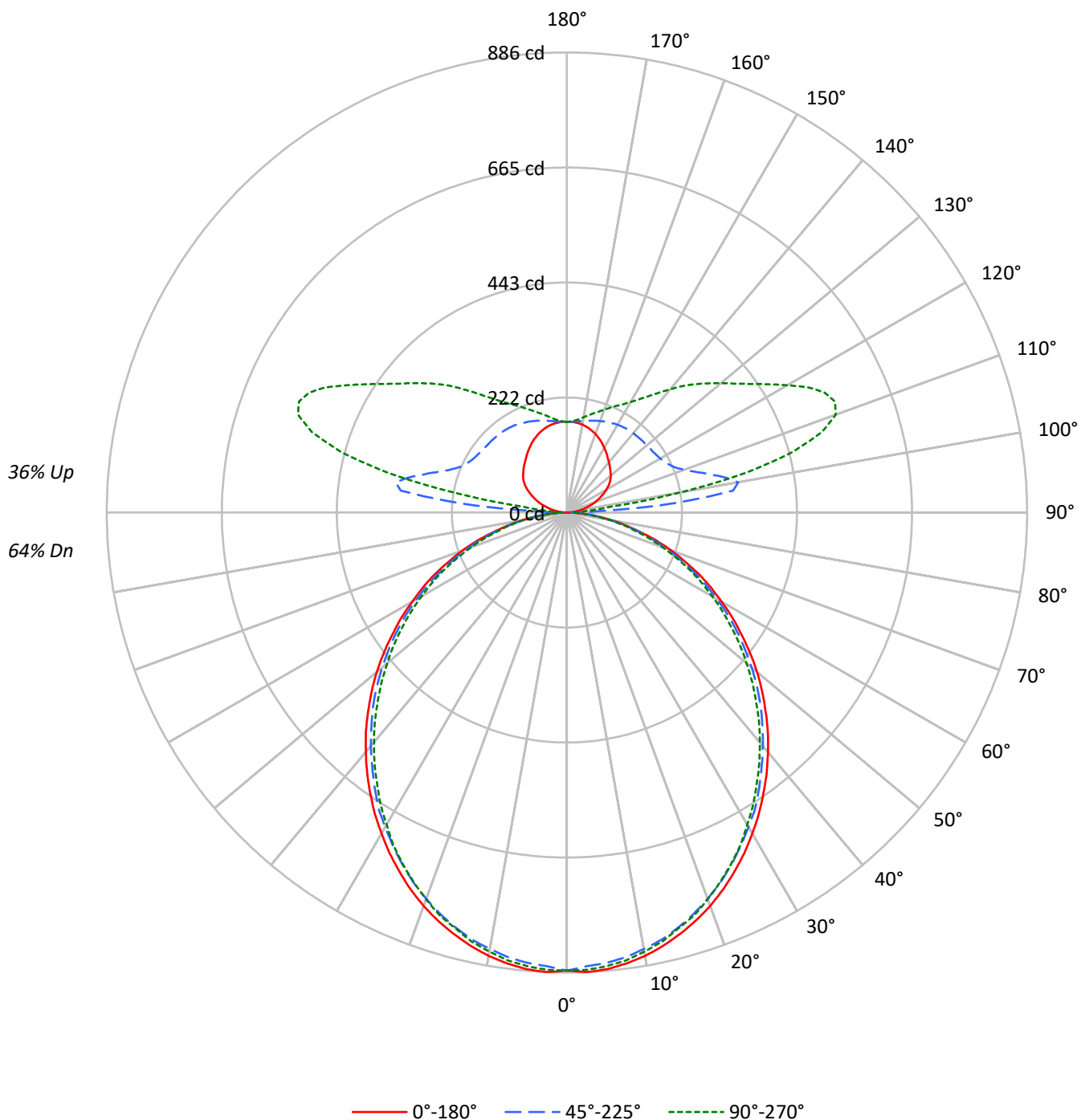
Lumens per Lamp: N/A
Luminaire Lumens: 3614.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 33.3
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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	101	96	92	89	94	91	87	84	80	77	75	70	68	66	61	59	58
2	92	84	78	72	86	79	74	69	70	65	62	61	58	55	53	51	49
3	84	74	66	60	78	70	63	57	62	56	52	54	50	47	47	44	41
4	77	65	57	51	72	62	54	49	55	49	44	48	44	40	42	39	36
5	70	58	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31
6	65	52	44	38	61	50	42	37	44	38	33	39	34	30	34	30	27
7	60	47	39	34	56	45	37	32	40	34	30	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9496	9496	9496
5°	9520	9168	9155
10°	9435	8858	8767
15°	9304	8535	8345
20°	9154	8177	7926
25°	8959	7799	7479
30°	8746	7408	7008
35°	8523	7008	6541
40°	8289	6588	6081
45°	8033	6180	5601
50°	7771	5723	5118
55°	7436	5250	4629
60°	7090	4726	4109
65°	6766	4159	3567
70°	6299	3530	2934
75°	5626	2795	2277
80°	4859	1964	1612
85°	3785	1055	807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	2.3
10°-20°	234.8	6.5
20°-30°	346.8	9.6
30°-40°	405.1	11.2
40°-50°	407.2	11.3
50°-60°	357.7	9.9
60°-70°	266.4	7.4
70°-80°	151.6	4.2
80°-90°	44.1	1.2
90°-100°	99.3	2.7
100°-110°	277.5	7.7
110°-120°	270.6	7.5
120°-130°	215.4	6.0
130°-140°	170.1	4.7
140°-150°	126.9	3.5
150°-160°	88.5	2.4
160°-170°	52.0	1.4
170°-180°	16.9	0.5
0°-30°	664.8	18.4
0°-40°	1069.9	29.6
0°-60°	1834.9	50.8
0°-90°	2297.0	63.6
90°-120°	647.3	17.9
90°-150°	1159.7	32.1
90°-180°	1317.0	36.4
0°-180°	3614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	883	879	871	878	877	84
15°	840	838	828	834	829	237
25°	763	759	749	750	747	352
35°	660	655	646	641	637	413
45°	541	538	528	519	515	418
55°	410	410	400	391	388	368
65°	280	276	268	262	260	276
75°	148	145	143	139	136	158
85°	39	38	38	36	36	42
90°	1	4	9	10	10	4
95°	12	39	210	61	41	13
105°	41	61	284	497	450	44
115°	72	90	218	477	547	72
125°	101	119	203	368	431	90
135°	118	141	200	303	350	91
145°	135	154	198	248	273	84
155°	153	165	191	218	227	70
165°	167	172	183	194	198	47
175°	174	174	176	178	178	17
180°	175	175	175	175	175	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	882.2	882.2	882.2	882.2	882.2
2.5°	886.0	883.0	874.6	882.2	881.5
5°	883.0	879.2	870.8	878.4	876.9
7.5°	876.1	872.3	864.0	870.8	870.1
10°	867.0	863.2	853.4	860.2	858.7
12.5°	854.9	851.9	842.8	847.3	846.6
15°	840.5	837.5	827.6	833.7	829.1
17.5°	824.6	820.8	810.9	815.5	813.9
20°	806.4	801.8	791.9	795.0	792.7
22.5°	785.9	781.3	771.5	773.7	770.7
25°	763.1	758.6	748.7	749.5	747.2
27.5°	739.6	735.0	724.4	725.2	722.9
30°	713.8	710.0	699.4	699.4	694.1
32.5°	688.0	682.7	675.1	669.8	667.5
35°	660.0	655.4	645.5	641.0	637.2
37.5°	631.9	625.8	616.0	610.6	608.4
40°	602.3	597.7	587.1	581.1	578.0
42.5°	572.7	567.4	556.8	550.7	547.7
45°	540.9	537.8	528.0	518.9	515.1
47.5°	509.8	505.2	496.1	487.0	484.0
50°	477.9	474.1	464.2	455.9	451.3
52.5°	444.5	442.2	431.6	424.8	420.2
55°	410.4	409.6	399.8	391.4	387.6
57.5°	378.5	375.5	367.9	360.3	355.8
60°	343.6	342.9	333.8	326.9	323.1
62.5°	312.5	310.3	301.1	294.3	292.0
65°	279.9	276.1	268.5	262.5	260.2
67.5°	245.0	242.0	235.9	230.6	227.6
70°	213.9	209.4	204.8	199.5	195.7
72.5°	181.3	178.3	173.0	168.4	166.9
75°	147.9	144.9	142.6	138.8	136.5
77.5°	118.3	116.8	113.8	110.8	110.8
80°	89.5	87.2	85.7	85.0	85.0
82.5°	61.4	61.4	61.4	59.9	59.2
85°	39.4	37.9	37.9	36.4	36.4
87.5°	19.7	17.4	16.7	15.9	15.9
90°	0.7	4.2	8.8	9.9	10.3
92.5°	5.3	21.2	65.8	22.4	18.7
95°	12.0	39.1	209.7	61.2	41.0
97.5°	19.1	44.7	322.5	153.8	84.2
100°	26.2	49.3	334.9	321.8	221.7
102.5°	33.6	54.6	311.9	430.9	351.1
105°	41.0	60.6	284.3	497.2	449.8
107.5°	48.8	67.7	259.9	526.4	514.2
110°	57.3	75.0	239.8	527.2	550.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.1	82.6	226.3	507.3	558.4
115°	72.5	90.4	217.5	476.8	547.1
117.5°	79.9	97.8	211.5	444.3	522.3
120°	87.7	105.2	207.6	413.6	489.8
122.5°	94.4	112.2	205.1	389.4	459.4
125°	100.8	119.0	203.0	367.8	431.4
127.5°	105.7	125.4	201.9	350.1	407.4
130°	110.3	131.0	200.9	333.8	387.6
132.5°	113.9	136.1	200.5	318.6	368.1
135°	118.1	140.9	200.2	302.9	349.7
137.5°	122.0	144.8	199.4	288.0	330.3
140°	125.9	148.4	199.1	273.5	309.8
142.5°	130.1	151.6	198.4	260.2	290.7
145°	134.7	154.4	197.7	248.4	273.4
147.5°	139.3	157.4	196.6	239.2	258.5
150°	143.9	159.8	195.2	231.1	245.8
152.5°	148.5	162.5	193.4	224.0	235.2
155°	153.1	165.1	191.3	217.5	226.7
157.5°	156.7	167.4	189.5	211.1	218.5
160°	160.9	169.4	187.4	205.2	210.8
162.5°	164.1	170.8	185.3	199.8	203.7
165°	167.3	172.0	183.2	194.3	197.7
167.5°	169.7	173.1	181.1	189.5	191.7
170°	171.9	173.6	178.9	185.3	186.4
172.5°	173.3	174.2	177.2	181.6	181.4
175°	174.3	174.5	175.8	178.2	177.9
177.5°	175.0	174.7	174.7	176.1	175.4
180°	174.7	174.7	174.7	174.7	174.7

(END OF REPORT)