

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: P1011800

Luminaire Tested: S123DIP-B560D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011800
REPORT IS A COMBINATION OF REPORTS P990088 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-F1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

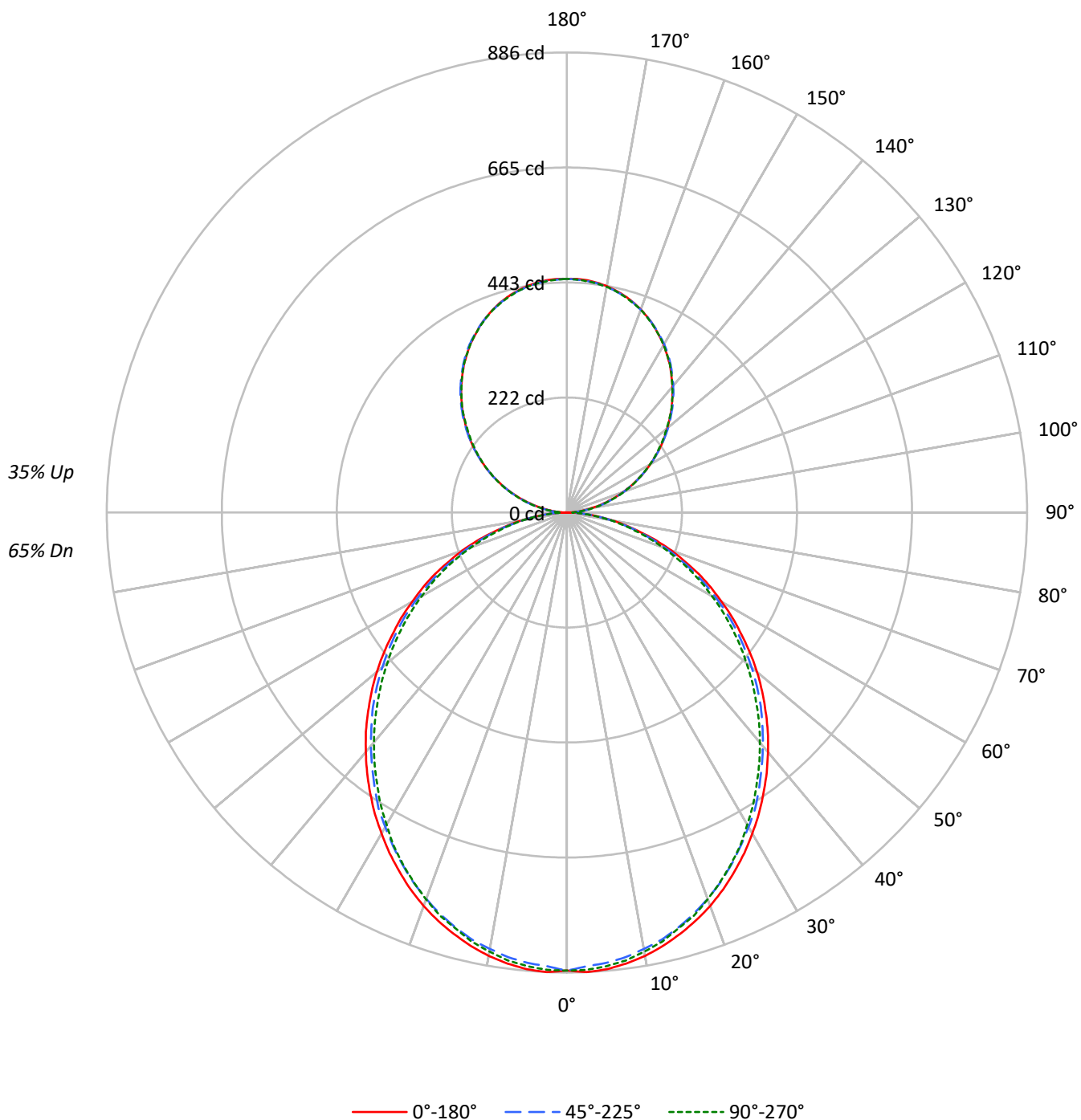
Lumens per Lamp: N/A
Luminaire Lumens: 3544.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70
1	101	97	93	89	95	91	87	84	80	78	75	71	69	67	62	60	59
2	92	84	78	73	86	79	74	69	70	66	62	62	59	56	54	52	49
3	84	74	67	61	79	70	63	58	62	57	52	55	51	47	48	45	42
4	77	66	57	51	72	62	55	49	55	49	45	49	44	40	43	39	36
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	39	35	32
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	29	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	26	22	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	6.6
20°-30°	346.8	9.8
30°-40°	405.1	11.4
40°-50°	407.2	11.5
50°-60°	357.7	10.1
60°-70°	266.4	7.5
70°-80°	151.6	4.3
80°-90°	44.0	1.2
90°-100°	29.0	0.8
100°-110°	87.7	2.5
110°-120°	149.3	4.2
120°-130°	196.4	5.5
130°-140°	220.7	6.2
140°-150°	217.0	6.1
150°-160°	182.7	5.2
160°-170°	121.6	3.4
170°-180°	42.6	1.2
0°-30°	664.8	18.8
0°-40°	1069.9	30.2
0°-60°	1834.9	51.8
0°-90°	2296.9	64.8
90°-120°	265.9	7.5
90°-150°	900.1	25.4
90°-180°	1247.0	35.2
0°-180°	3544.0	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°	0	4	8	10	11	4
95°	21	23	26	28	28	23
105°	80	80	83	83	84	85
115°	150	151	151	151	151	149
125°	220	221	220	219	217	196
135°	285	287	287	286	285	220
145°	346	347	348	348	346	216
155°	396	396	397	398	396	182
165°	432	431	431	433	430	122
175°	449	448	448	450	447	43
180°	450	450	450	450	450	

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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°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.9	23.3	26.2	27.6	27.6
97.5°	34.3	36.1	38.2	40.0	39.6
100°	48.1	50.2	52.0	53.0	53.7
102.5°	64.0	65.1	67.5	68.6	68.2
105°	79.5	80.3	83.4	83.4	84.1
107.5°	97.9	98.3	99.7	100.8	100.4
110°	114.9	115.6	116.3	117.7	117.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	132.9	132.9	134.7	134.7
115°	150.3	151.3	150.6	151.0	150.6
117.5°	168.3	168.6	167.9	167.9	166.9
120°	184.9	187.0	185.3	184.9	184.2
122.5°	202.2	203.6	202.9	201.9	200.8
125°	219.9	221.0	220.3	218.8	217.4
127.5°	236.2	238.3	237.6	235.5	234.0
130°	252.4	255.3	254.2	252.8	250.3
132.5°	268.7	271.5	270.8	269.0	267.3
135°	285.3	287.4	287.1	285.7	285.0
137.5°	300.5	302.3	303.3	301.6	300.5
140°	316.4	318.2	318.5	318.2	315.7
142.5°	330.9	332.7	333.4	333.0	331.3
145°	346.1	346.8	347.9	347.5	346.1
147.5°	359.2	360.6	361.7	361.7	359.6
150°	373.0	373.7	374.4	374.4	372.3
152.5°	384.3	385.4	385.7	386.4	384.7
155°	396.3	396.3	396.7	398.1	395.6
157.5°	406.6	406.2	406.6	408.0	405.9
160°	416.1	415.4	415.4	417.2	415.8
162.5°	424.6	423.5	423.9	425.7	423.2
165°	431.7	430.6	430.6	432.7	430.3
167.5°	437.7	436.3	436.6	438.8	436.6
170°	442.6	441.2	441.2	443.7	441.2
172.5°	446.5	445.1	445.1	447.2	444.8
175°	449.0	447.6	447.6	449.7	447.2
177.5°	450.4	449.0	449.0	451.1	448.7
180°	450.1	450.1	450.1	450.1	450.1

(END OF REPORT)