

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: P1011798

Luminaire Tested: S123DIP-B560D365UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011798
REPORT IS A COMBINATION OF REPORTS P990086 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-D4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

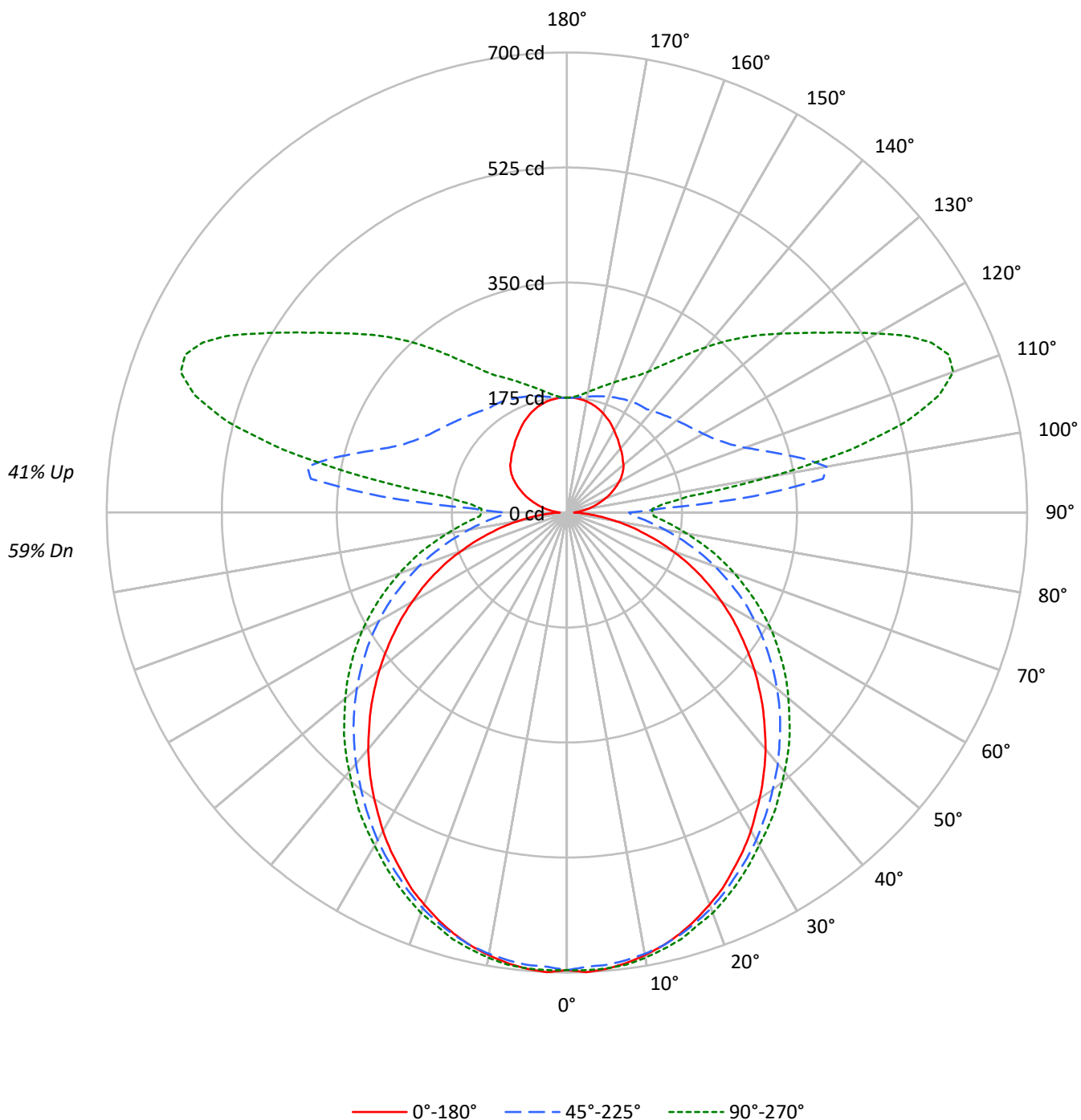
Lumens per Lamp: N/A
Luminaire Lumens: 3658.1 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	98	94	89	85	92	87	83	80	75	73	70	65	62	60	55	53	52
2	89	81	74	69	83	76	70	65	65	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	42	38	36
4	74	62	54	48	69	58	51	45	51	45	40	44	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	35	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7495	7495	7495
5°	7515	7275	7269
10°	7444	7078	7023
15°	7347	6860	6764
20°	7206	6618	6484
25°	7034	6344	6195
30°	6858	6097	5905
35°	6661	5837	5668
40°	6471	5601	5418
45°	6263	5371	5212
50°	6056	5144	4988
55°	5827	4910	4783
60°	5602	4671	4572
65°	5371	4417	4325
70°	5027	4132	4071
75°	4588	3807	3809
80°	4077	3477	3510
85°	3573	3211	3296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6263 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	1.8
10°-20°	188.3	5.1
20°-30°	281.6	7.7
30°-40°	336.2	9.2
40°-50°	351.8	9.6
50°-60°	330.1	9.0
60°-70°	275.7	7.5
70°-80°	197.1	5.4
80°-90°	118.3	3.2
90°-100°	173.0	4.7
100°-110°	331.7	9.1
110°-120°	306.8	8.4
120°-130°	236.1	6.5
130°-140°	179.3	4.9
140°-150°	128.8	3.5
150°-160°	88.5	2.4
160°-170°	52.0	1.4
170°-180°	16.9	0.5
0°-30°	535.9	14.6
0°-40°	872.1	23.8
0°-60°	1553.9	42.5
0°-90°	2145.1	58.6
90°-120°	811.4	22.2
90°-150°	1355.6	37.1
90°-180°	1513.0	41.4
0°-180°	3658.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	697	696	691	697	696	66
15°	664	666	665	673	672	187
25°	599	607	609	619	619	276
35°	516	528	538	549	552	323
45°	422	440	459	473	479	325
55°	322	347	374	394	400	288
65°	222	252	285	308	316	220
75°	121	156	194	219	228	129
85°	37	75	115	141	149	38
90°	11	51	94	121	129	8
95°	20	77	285	160	147	19
105°	47	85	341	575	535	50
115°	76	103	258	535	612	76
125°	103	121	227	408	477	92
135°	120	142	209	326	376	92
145°	136	154	198	254	282	85
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°	696.3	696.3	696.3	696.3	696.3
2.5°	700.1	697.8	691.7	697.8	697.0
5°	697.0	695.5	691.0	697.0	696.3
7.5°	691.7	691.7	687.2	694.7	694.0
10°	684.1	685.6	681.9	689.4	687.9
12.5°	675.0	677.3	675.0	681.9	680.3
15°	663.7	665.9	665.2	672.8	672.0
17.5°	650.0	654.6	653.8	660.6	659.1
20°	634.8	639.4	640.9	647.7	648.5
22.5°	618.9	623.5	625.7	634.8	634.1
25°	599.2	606.8	609.0	618.9	618.9
27.5°	580.2	588.6	593.1	601.5	602.2
30°	559.7	569.6	575.7	584.8	584.8
32.5°	537.0	548.4	556.7	566.6	568.8
35°	515.8	527.9	537.7	549.1	552.2
37.5°	493.0	506.7	518.0	530.9	533.2
40°	470.2	483.9	499.1	512.0	515.0
42.5°	445.2	462.7	478.6	493.0	497.5
45°	421.7	439.9	458.9	473.3	479.3
47.5°	396.7	417.2	438.4	454.3	458.9
50°	372.4	393.6	417.2	434.6	439.9
52.5°	346.6	369.4	395.9	414.1	420.9
55°	321.6	346.6	373.9	394.4	400.5
57.5°	297.3	323.1	352.7	373.2	380.0
60°	271.5	298.8	329.9	351.2	359.5
62.5°	247.3	275.3	308.7	329.9	337.5
65°	222.2	251.8	285.2	307.9	315.5
67.5°	197.2	228.3	261.7	286.7	292.8
70°	170.7	203.3	239.7	263.9	271.5
72.5°	146.4	179.0	216.9	241.9	249.5
75°	120.6	156.2	194.2	219.2	228.3
77.5°	98.6	134.2	172.2	198.7	205.5
80°	75.1	112.3	151.7	177.5	185.1
82.5°	54.6	92.5	132.7	158.5	166.1
85°	37.2	75.1	115.3	141.1	148.7
87.5°	22.8	60.7	99.4	125.1	132.7
90°	10.6	51.2	94.5	121.4	129.4
92.5°	14.4	62.9	145.4	127.2	130.2
95°	20.3	77.0	284.8	159.8	147.2
97.5°	26.7	79.6	393.0	247.2	185.1
100°	33.0	80.4	400.9	409.8	317.3
102.5°	39.7	81.9	373.3	513.6	441.4
105°	47.1	85.0	341.2	575.3	534.7
107.5°	54.1	88.9	312.2	599.2	593.8
110°	61.9	93.2	288.3	595.6	625.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.7	97.8	270.3	570.3	628.2
115°	76.3	103.2	257.7	535.2	611.6
117.5°	83.7	107.7	247.1	498.2	582.2
120°	90.7	112.0	239.5	462.8	544.4
122.5°	97.4	116.8	233.2	434.0	509.5
125°	103.1	121.3	227.3	408.0	476.9
127.5°	108.0	126.8	222.4	385.7	448.4
130°	112.6	132.5	217.6	364.9	423.2
132.5°	115.4	137.6	213.4	345.1	400.0
135°	119.6	141.7	209.3	325.7	376.2
137.5°	123.5	145.6	205.5	306.2	352.3
140°	126.7	149.2	202.1	287.9	328.0
142.5°	130.9	151.6	198.4	270.2	304.4
145°	135.5	154.4	197.7	254.5	282.5
147.5°	139.3	157.4	196.6	241.5	263.8
150°	143.9	159.8	195.2	231.1	247.3
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)