

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: P1024924

Luminaire Tested: S124DIP-B1020D365UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024924
REPORT IS A COMBINATION OF REPORTS P995284 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

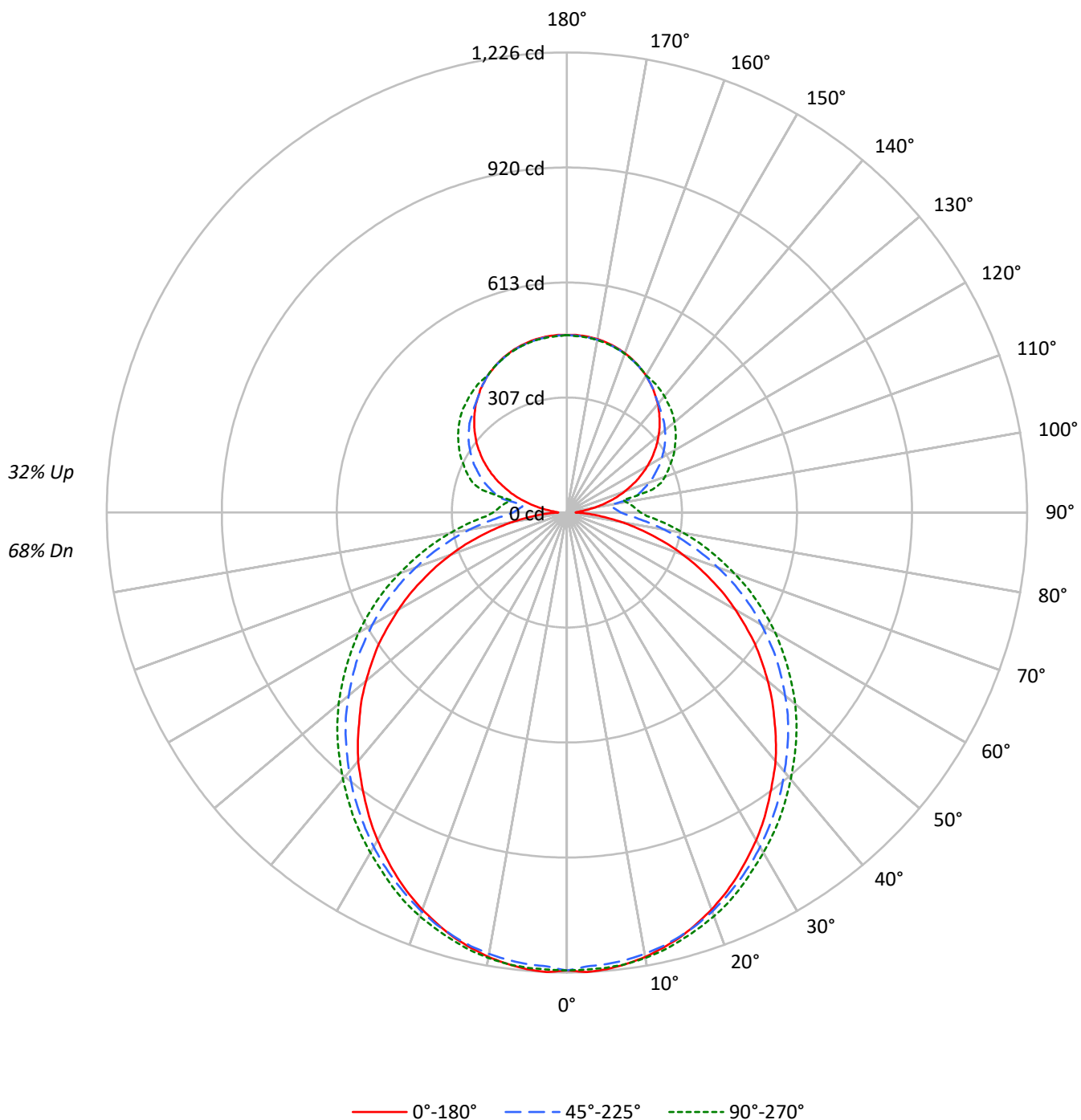
Lumens per Lamp: N/A
Luminaire Lumens: 5625.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	62	61	59
1	101	95	91	87	95	90	86	83	80	77	74	71	69	66	62	61	59	55	54	51
2	91	83	76	70	85	78	72	67	69	65	60	61	58	54	54	51	49	45	47	44
3	83	72	64	58	78	68	61	55	61	55	50	54	49	45	47	44	41	37	42	38
4	75	64	55	48	71	60	52	46	54	47	42	48	43	38	42	38	35	31	34	30
5	69	57	48	41	65	54	46	40	48	41	36	43	37	33	38	33	30	27	34	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	34	30	26	24	31	27
7	59	46	37	31	55	43	36	30	39	33	28	35	30	25	31	27	23	21	29	24
8	55	42	33	28	51	40	32	27	36	29	25	32	27	23	29	24	21	18	26	22
9	51	38	30	25	48	36	29	24	33	26	22	29	24	20	26	22	19	17	24	20
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17	15	24	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	2.1
10°-20°	331.3	5.9
20°-30°	501.0	8.9
30°-40°	606.1	10.8
40°-50°	640.7	11.4
50°-60°	603.0	10.7
60°-70°	500.4	8.9
70°-80°	351.1	6.2
80°-90°	198.9	3.5
90°-100°	133.5	2.4
100°-110°	190.6	3.4
110°-120°	255.9	4.5
120°-130°	283.5	5.0
130°-140°	282.3	5.0
140°-150°	253.5	4.5
150°-160°	202.1	3.6
160°-170°	130.3	2.3
170°-180°	44.9	0.8
0°-30°	947.9	16.9
0°-40°	1554.0	27.6
0°-60°	2797.7	49.7
0°-90°	3848.2	68.4
90°-120°	580.1	10.3
90°-150°	1399.4	24.9
90°-180°	1777.0	31.6
0°-180°	5625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	23	82	143	185	196	16
95°	37	70	127	166	178	38
105°	119	148	200	238	236	125
115°	207	220	264	294	304	204
125°	285	285	318	345	354	255
135°	349	349	360	382	391	270
145°	401	401	401	409	415	251
155°	438	438	437	439	438	202
165°	462	460	460	463	460	131
175°	473	471	471	474	470	45
180°	473	473	473	473	473	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	23.0	81.5	143.1	184.8	196.5
92.5°	25.8	72.9	134.5	174.9	185.8
95°	37.2	70.3	126.7	165.7	178.4
97.5°	53.5	100.9	119.9	157.1	169.8
100°	73.0	115.0	119.5	150.3	160.2
102.5°	96.3	130.7	186.8	142.9	153.8
105°	118.7	148.2	200.5	237.9	236.1
107.5°	141.7	166.0	216.4	252.2	263.2
110°	163.7	183.9	233.9	266.0	278.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	185.0	203.5	249.3	279.0	291.4
115°	206.9	220.3	263.6	294.5	304.1
117.5°	227.8	237.4	279.5	307.8	318.7
120°	247.6	253.1	292.5	320.5	330.7
122.5°	267.4	268.1	305.7	333.5	342.3
125°	284.9	284.9	318.4	345.3	353.9
127.5°	302.9	301.9	330.9	355.2	364.4
130°	318.8	317.8	340.7	365.7	373.9
132.5°	334.7	334.1	351.9	375.5	383.4
135°	349.3	348.9	359.9	382.5	391.4
137.5°	363.4	362.1	369.3	390.5	397.0
140°	377.2	376.6	378.6	397.5	404.6
142.5°	388.3	389.7	388.6	404.3	409.8
145°	401.0	400.7	400.7	409.2	415.4
147.5°	410.9	411.6	411.3	413.0	418.8
150°	421.9	421.9	421.5	421.5	421.9
152.5°	429.7	430.7	430.0	430.7	430.4
155°	438.1	438.5	437.4	438.9	437.8
157.5°	445.6	445.6	444.2	445.9	444.2
160°	451.9	450.9	450.5	452.6	450.5
162.5°	457.6	456.2	455.8	458.0	455.5
165°	462.2	460.4	460.4	463.3	460.1
167.5°	466.1	464.3	464.0	467.1	463.6
170°	469.3	467.1	467.5	470.3	466.8
172.5°	471.4	469.3	469.6	472.5	468.6
175°	472.8	470.7	471.0	474.2	470.0
177.5°	473.9	471.4	472.1	474.9	470.7
180°	472.8	472.8	472.8	472.8	472.8

(END OF REPORT)