

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: P1024925

Luminaire Tested: S124DIP-B1020D365UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024925
REPORT IS A COMBINATION OF REPORTS P995285 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-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

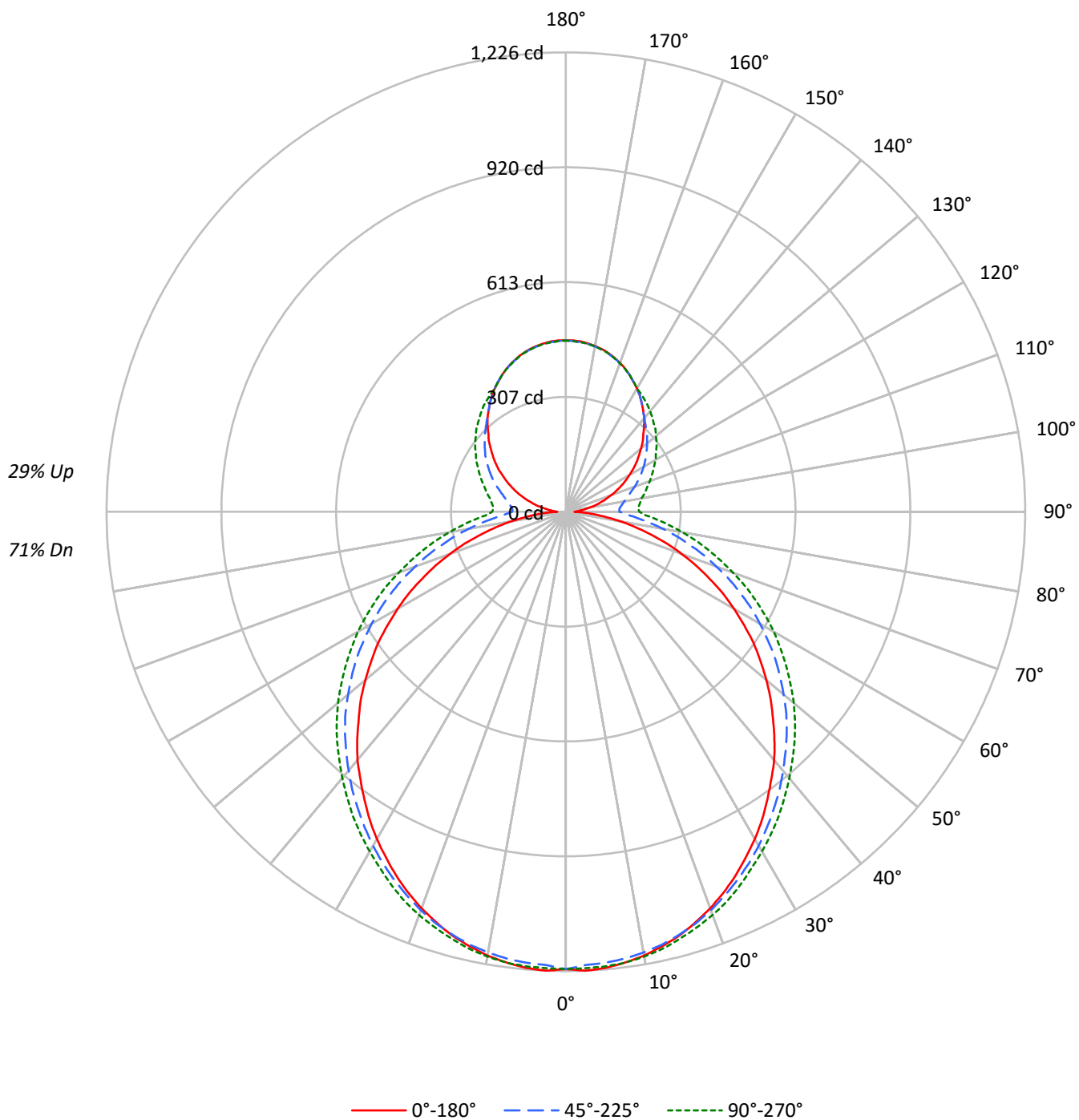
Lumens per Lamp: N/A
Luminaire Lumens: 5430.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
Input Voltage (V):
Input Current (A_{in}): 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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	68	64	63	61
2	91	83	76	70	86	79	72	67	70	65	61	63	59	55	56	53	50
3	83	72	64	58	78	69	61	55	62	56	51	55	50	46	49	45	42
4	76	64	55	49	71	61	53	47	54	48	43	49	44	39	43	39	36
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31
6	64	51	42	36	60	48	40	35	44	37	32	39	34	30	35	31	27
7	59	46	37	31	56	44	36	30	40	33	28	36	30	26	32	27	24
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21
9	51	38	30	25	48	36	29	24	33	27	22	30	25	21	27	23	19
10	48	35	27	22	45	34	26	22	31	24	20	28	23	19	25	21	17

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	6.1
20°-30°	501.0	9.2
30°-40°	606.1	11.2
40°-50°	640.7	11.8
50°-60°	603.0	11.1
60°-70°	500.4	9.2
70°-80°	351.1	6.5
80°-90°	198.9	3.7
90°-100°	147.7	2.7
100°-110°	176.5	3.3
110°-120°	210.1	3.9
120°-130°	232.9	4.3
130°-140°	238.8	4.4
140°-150°	223.5	4.1
150°-160°	185.6	3.4
160°-170°	123.5	2.3
170°-180°	43.2	0.8
0°-30°	947.9	17.5
0°-40°	1554.0	28.6
0°-60°	2797.7	51.5
0°-90°	3848.2	70.9
90°-120°	534.3	9.8
90°-150°	1229.4	22.6
90°-180°	1582.0	29.1
0°-180°	5430.0	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	81	143	185	196	17
95°	39	87	146	184	196	37
105°	95	122	174	210	222	101
115°	162	175	218	247	257	161
125°	230	228	262	288	295	205
135°	292	294	304	325	332	226
145°	353	353	353	361	366	221
155°	403	403	403	404	403	186
165°	439	438	437	439	438	124
175°	456	454	454	457	454	43
180°	457	457	457	457	457	

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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	81.4	143.1	184.8	196.5
92.5°	29.7	82.1	142.7	182.0	193.3
95°	39.0	87.3	145.8	183.7	196.0
97.5°	50.3	92.8	151.7	188.6	200.9
100°	64.5	101.5	158.0	195.6	205.1
102.5°	80.7	111.2	165.9	202.6	213.8
105°	94.7	122.3	174.3	209.6	221.5
107.5°	112.0	135.5	183.8	219.3	228.5
110°	128.2	148.2	195.6	226.3	238.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	145.3	161.7	206.1	236.1	247.1
115°	162.3	174.6	217.6	247.3	256.6
117.5°	179.6	187.8	228.5	256.1	265.9
120°	195.5	201.1	239.7	265.2	276.8
122.5°	213.6	213.9	250.5	276.8	284.5
125°	229.9	228.5	262.4	287.6	295.1
127.5°	245.8	245.5	272.1	296.0	305.2
130°	261.4	261.1	283.0	306.9	313.6
132.5°	278.7	278.0	294.1	316.7	324.5
135°	292.2	294.3	303.9	325.1	332.2
137.5°	308.8	308.5	314.7	334.1	341.3
140°	325.4	324.8	326.1	343.5	350.0
142.5°	339.3	340.0	338.2	353.2	358.7
145°	353.1	353.1	353.4	361.3	365.7
147.5°	367.2	367.6	367.2	368.3	373.3
150°	379.9	380.0	380.0	380.0	379.6
152.5°	390.6	391.3	391.6	392.7	391.6
155°	402.9	402.9	402.6	404.0	402.6
157.5°	413.5	412.8	412.8	413.9	412.8
160°	422.7	422.4	422.0	423.1	421.3
162.5°	431.2	430.1	429.8	431.9	430.1
165°	438.6	437.6	436.9	439.0	437.6
167.5°	444.6	443.2	443.2	445.3	443.2
170°	449.6	447.8	448.2	450.3	447.8
172.5°	453.1	451.7	451.7	454.2	451.7
175°	456.3	454.5	454.2	456.7	454.2
177.5°	457.7	455.9	455.9	458.4	455.6
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)