

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: P1024933

Luminaire Tested: S124DIP-B1020D365UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024933
REPORT IS A COMBINATION OF REPORTS P995293 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

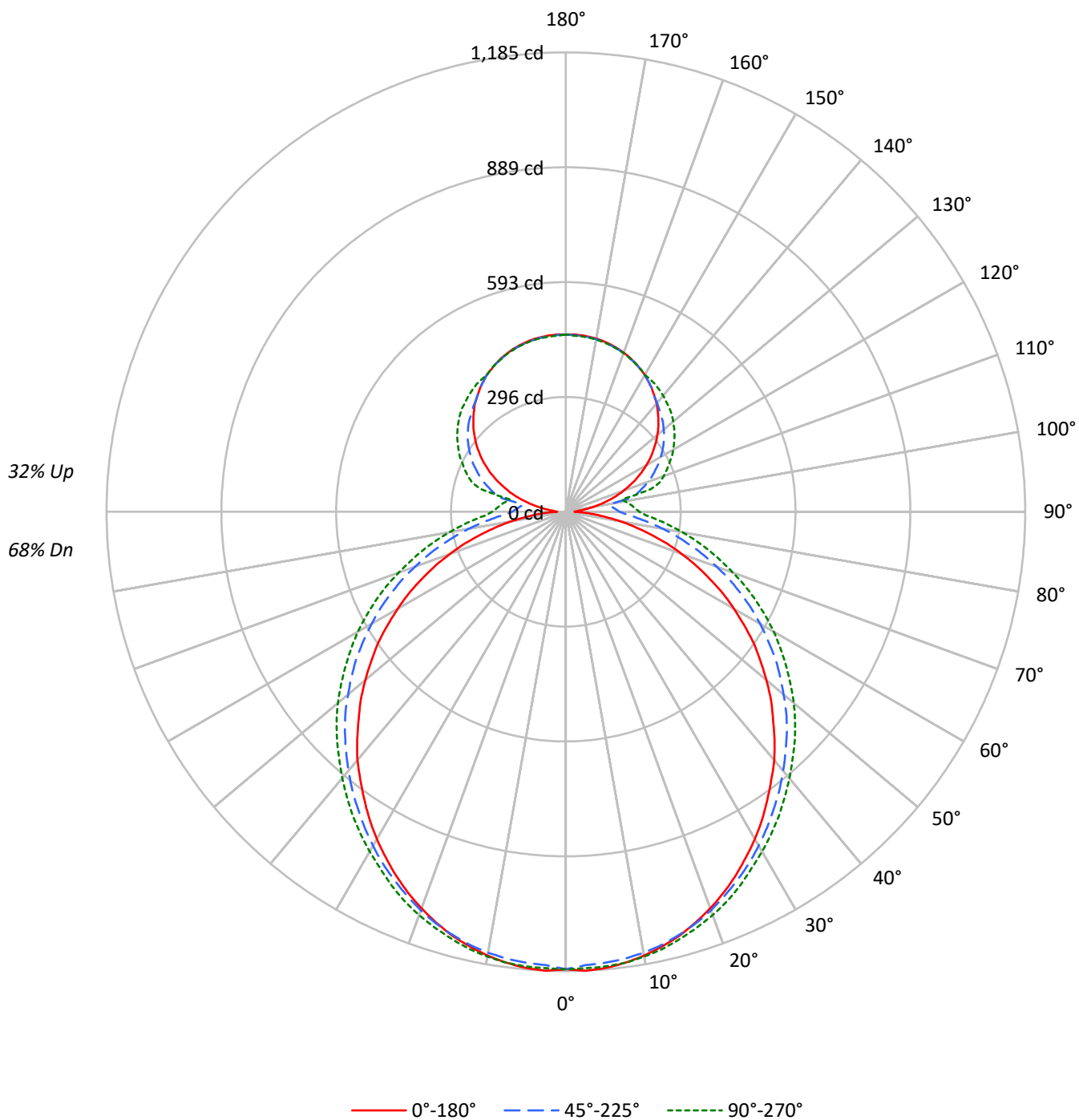
Lumens per Lamp: N/A
Luminaire Lumens: 5438.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9622	9622	9622
5°	9649	9371	9388
10°	9586	9187	9160
15°	9496	8980	8904
20°	9363	8755	8654
25°	9213	8507	8386
30°	9052	8262	8112
35°	8868	8012	7867
40°	8720	7771	7614
45°	8503	7545	7391
50°	8318	7289	7155
55°	8126	7042	6883
60°	7829	6734	6628
65°	7501	6402	6320
70°	7103	6023	5965
75°	6550	5602	5627
80°	5923	5172	5272
85°	5094	4741	4985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	2.1
10°-20°	320.3	5.9
20°-30°	484.4	8.9
30°-40°	586.0	10.8
40°-50°	619.5	11.4
50°-60°	583.0	10.7
60°-70°	483.8	8.9
70°-80°	339.5	6.2
80°-90°	192.3	3.5
90°-100°	129.1	2.4
100°-110°	184.3	3.4
110°-120°	247.4	4.5
120°-130°	274.1	5.0
130°-140°	272.8	5.0
140°-150°	245.0	4.5
150°-160°	195.4	3.6
160°-170°	126.0	2.3
170°-180°	43.4	0.8
0°-30°	916.5	16.9
0°-40°	1502.5	27.6
0°-60°	2705.0	49.7
0°-90°	3720.6	68.4
90°-120°	560.8	10.3
90°-150°	1352.6	24.9
90°-180°	1717.0	31.6
0°-180°	5438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1181	1177	1168	1179	1177	112
15°	1132	1134	1130	1142	1140	319
25°	1036	1044	1048	1062	1064	477
35°	906	922	936	954	958	568
45°	756	781	806	828	835	584
55°	592	620	659	686	694	528
65°	410	452	497	530	540	406
75°	227	276	332	369	381	241
85°	70	126	185	225	238	73
90°	22	79	138	179	190	15
95°	36	68	122	160	172	37
105°	115	143	194	230	228	121
115°	200	213	255	285	294	197
125°	275	275	308	334	342	246
135°	338	337	348	370	378	261
145°	388	387	387	396	402	242
155°	424	424	423	424	423	195
165°	447	445	445	448	445	126
175°	457	455	455	458	454	44
180°	457	457	457	457	457	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1185.3	1181.3	1170.7	1180.0	1178.6
5°	1181.3	1177.3	1168.1	1178.6	1177.3
7.5°	1173.4	1170.7	1162.8	1174.7	1173.4
10°	1162.8	1161.5	1154.9	1166.8	1165.4
12.5°	1148.3	1148.3	1144.3	1154.9	1154.9
15°	1132.4	1133.7	1129.8	1141.7	1140.3
17.5°	1111.3	1115.2	1113.9	1125.8	1124.5
20°	1088.8	1092.8	1094.1	1107.3	1107.3
22.5°	1063.7	1069.0	1071.6	1084.8	1087.5
25°	1035.9	1043.9	1047.8	1062.4	1063.7
27.5°	1005.6	1017.4	1022.7	1035.9	1037.3
30°	975.2	985.7	995.0	1009.5	1012.2
32.5°	942.1	955.3	965.9	983.1	985.7
35°	906.4	922.3	935.5	954.0	958.0
37.5°	870.8	889.3	905.1	923.6	927.6
40°	836.4	853.6	872.1	891.9	897.2
42.5°	796.8	816.6	839.1	861.5	865.5
45°	755.8	780.9	806.0	828.5	835.1
47.5°	717.5	742.6	771.7	794.1	802.1
50°	675.2	704.3	733.4	759.8	767.7
52.5°	632.9	662.0	696.4	722.8	730.7
55°	592.0	619.7	659.4	685.8	693.7
57.5°	545.7	580.1	618.4	650.1	656.7
60°	500.8	535.1	578.8	609.1	619.7
62.5°	457.2	495.5	539.1	569.5	580.1
65°	409.6	451.9	496.8	529.9	540.4
67.5°	364.7	409.6	457.2	490.2	500.8
70°	318.4	363.4	413.6	449.3	458.5
72.5°	273.5	319.8	373.9	408.3	418.9
75°	227.3	276.2	331.7	368.7	380.6
77.5°	183.7	235.2	293.3	330.3	343.6
80°	144.0	196.9	255.0	294.7	305.2
82.5°	104.4	159.9	218.0	259.0	270.9
85°	70.0	125.5	185.0	224.6	237.8
87.5°	43.6	97.8	155.9	194.2	206.1
90°	22.1	78.8	138.3	178.7	190.0
92.5°	24.9	70.5	130.1	169.1	179.7
95°	36.0	68.0	122.5	160.2	172.4
97.5°	51.8	97.6	115.9	151.9	164.2
100°	70.6	111.1	115.4	145.3	154.9
102.5°	93.1	126.3	180.6	138.1	148.6
105°	114.8	143.2	193.8	229.9	228.2
107.5°	137.0	160.5	209.1	243.8	254.5
110°	158.3	177.8	226.0	257.1	268.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.7	196.7	241.0	269.7	281.7
115°	200.0	212.9	254.9	284.7	293.9
117.5°	220.2	229.5	270.1	297.5	308.1
120°	239.4	244.7	282.7	309.8	319.7
122.5°	258.5	259.2	295.6	322.3	330.9
125°	275.3	275.4	307.7	333.8	342.1
127.5°	292.7	291.8	319.9	343.4	352.2
130°	308.2	307.1	329.4	353.5	361.4
132.5°	323.6	322.9	340.1	363.0	370.5
135°	337.6	337.2	347.9	369.7	378.4
137.5°	351.2	349.9	356.9	377.4	383.7
140°	364.6	363.9	365.9	384.2	391.1
142.5°	375.2	376.6	375.6	390.8	396.1
145°	387.5	387.3	387.3	395.5	401.5
147.5°	397.1	397.8	397.5	399.1	404.8
150°	407.7	407.8	407.4	407.4	407.8
152.5°	415.3	416.3	415.6	416.3	416.0
155°	423.5	423.8	422.8	424.2	423.1
157.5°	430.7	430.7	429.3	431.0	429.3
160°	436.8	435.8	435.4	437.5	435.4
162.5°	442.3	440.9	440.6	442.6	440.2
165°	446.7	445.0	445.0	447.8	444.7
167.5°	450.5	448.8	448.4	451.5	448.1
170°	453.6	451.5	451.9	454.6	451.2
172.5°	455.6	453.6	453.9	456.6	452.9
175°	457.0	454.9	455.3	458.3	454.2
177.5°	458.0	455.6	456.3	459.0	454.9
180°	457.0	457.0	457.0	457.0	457.0

(END OF REPORT)