

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: P1011315

Luminaire Tested: S123DIP-B1165D1195UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011315
REPORT IS A COMBINATION OF REPORTS P989426 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1195UB40-4F0-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

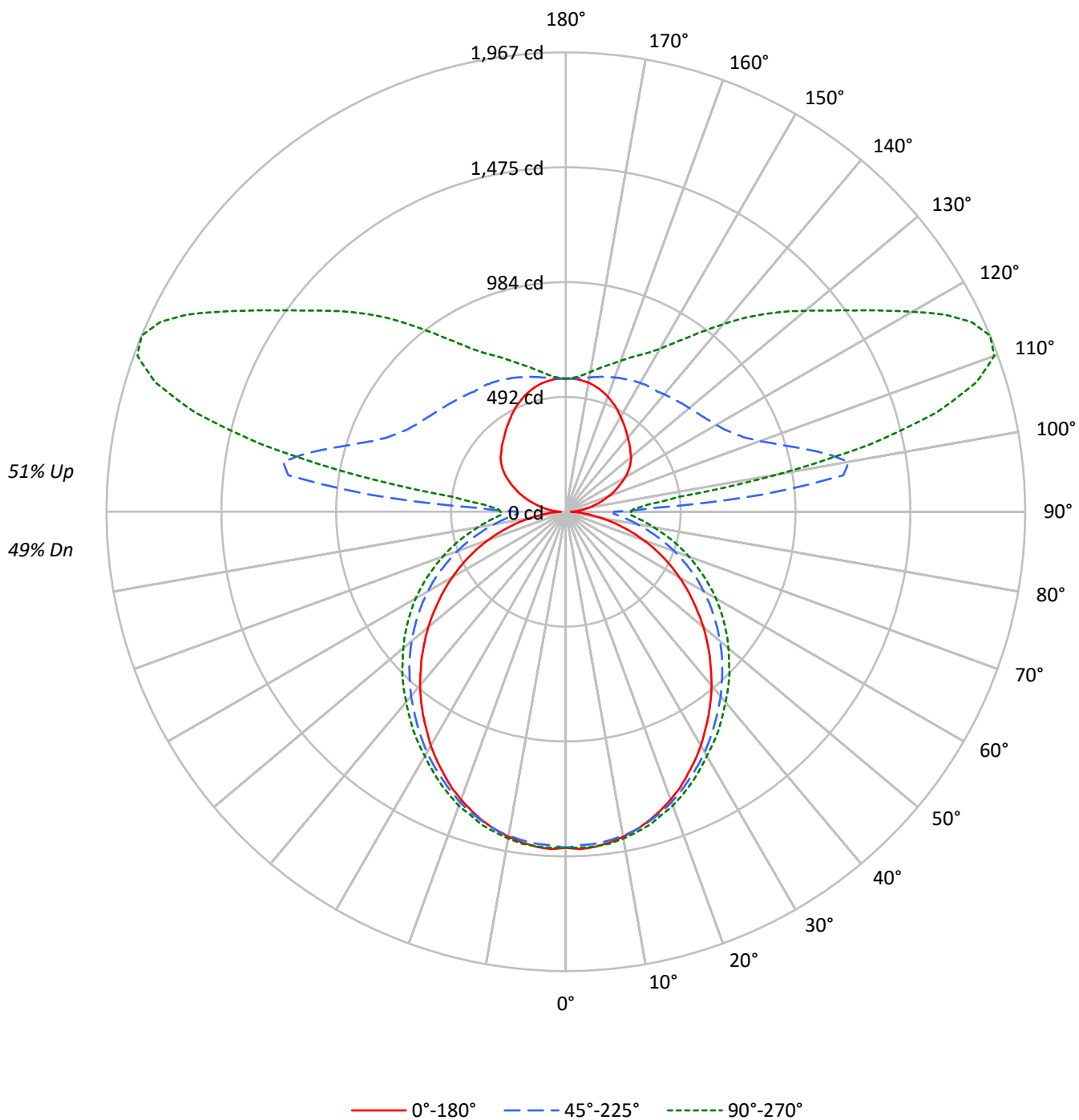
Lumens per Lamp: N/A
Luminaire Lumens: 9136.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 96.3
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	96	92	87	84	88	84	81	77	71	68	66	58	56	55	47	45	44
2	87	79	73	67	80	73	67	63	61	57	54	51	47	45	41	38	36
3	79	70	62	56	73	64	57	52	54	49	45	44	41	37	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	39	35	32	32	29	26
5	66	54	46	40	61	50	43	37	42	37	32	35	31	27	28	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20
7	56	44	36	30	52	41	33	28	35	29	25	29	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	19	21	18	16
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	16	14
10	46	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.5
10°-20°	388.9	4.3
20°-30°	581.6	6.4
30°-40°	694.4	7.6
40°-50°	726.5	8.0
50°-60°	681.7	7.5
60°-70°	569.4	6.2
70°-80°	407.2	4.5
80°-90°	245.5	2.7
90°-100°	476.3	5.2
100°-110°	1017.8	11.1
110°-120°	958.0	10.5
120°-130°	746.0	8.2
130°-140°	574.3	6.3
140°-150°	418.2	4.6
150°-160°	289.0	3.2
160°-170°	169.8	1.9
170°-180°	55.2	0.6
0°-30°	1106.9	12.1
0°-40°	1801.2	19.7
0°-60°	3209.4	35.1
0°-90°	4431.5	48.5
90°-120°	2452.1	26.8
90°-150°	4190.6	45.9
90°-180°	4705.0	51.5
0°-180°	9136.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	23	111	206	263	279	18
95°	56	206	840	403	353	55
105°	146	248	1046	1785	1644	155
115°	244	322	793	1677	1919	242
125°	334	393	713	1284	1502	297
135°	389	462	672	1036	1197	300
145°	441	504	645	824	911	276
155°	500	539	625	710	740	230
165°	546	562	598	634	645	154
175°	569	570	574	582	581	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	22.7	111.0	205.9	262.7	279.4
92.5°	36.1	155.5	379.2	289.5	291.5
95°	56.5	205.9	839.7	403.3	353.2
97.5°	78.0	218.2	1198.6	694.9	483.1
100°	99.5	225.2	1229.6	1232.2	921.2
102.5°	122.2	234.8	1145.1	1577.4	1332.8
105°	146.4	248.1	1045.7	1784.6	1643.9
107.5°	170.3	265.0	956.6	1868.8	1843.1
110°	196.4	282.4	883.0	1862.3	1952.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	300.8	829.7	1786.0	1967.0
115°	244.5	321.6	793.0	1677.4	1919.1
117.5°	268.7	339.6	764.0	1561.8	1828.9
120°	292.6	357.6	743.5	1451.9	1711.7
122.5°	314.5	376.0	727.6	1363.5	1603.0
125°	333.7	393.2	712.8	1283.6	1502.4
127.5°	349.9	412.4	701.5	1216.5	1414.5
130°	364.9	430.8	690.2	1154.0	1338.9
132.5°	374.8	447.6	681.2	1095.0	1267.6
135°	388.7	461.6	672.2	1035.8	1196.6
137.5°	401.4	474.4	663.6	977.9	1123.7
140°	412.6	485.9	656.3	922.8	1048.9
142.5°	426.4	494.7	647.6	870.1	977.2
145°	441.4	503.9	645.3	823.5	911.2
147.5°	454.9	513.8	641.9	785.7	854.9
150°	469.9	521.8	637.3	754.4	805.4
152.5°	484.9	530.5	631.5	731.4	767.7
155°	499.9	539.1	624.6	710.0	740.0
157.5°	511.4	546.6	618.8	689.2	713.5
160°	525.3	553.0	611.9	670.2	688.1
162.5°	535.7	557.6	604.9	652.2	665.0
165°	546.1	561.7	598.0	634.4	645.3
167.5°	554.1	565.1	591.1	618.8	625.7
170°	561.1	566.8	584.2	605.0	608.4
172.5°	565.7	568.6	578.4	592.8	592.2
175°	569.1	569.7	573.8	581.8	580.7
177.5°	571.5	570.3	570.3	574.9	572.6
180°	570.3	570.3	570.3	570.3	570.3

(END OF REPORT)