

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: P1012283

Luminaire Tested: S123RDIP-B1165D1025UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012283
REPORT IS A COMBINATION OF REPORTS P992952 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D1025UB40-4F0-XX-W2A-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

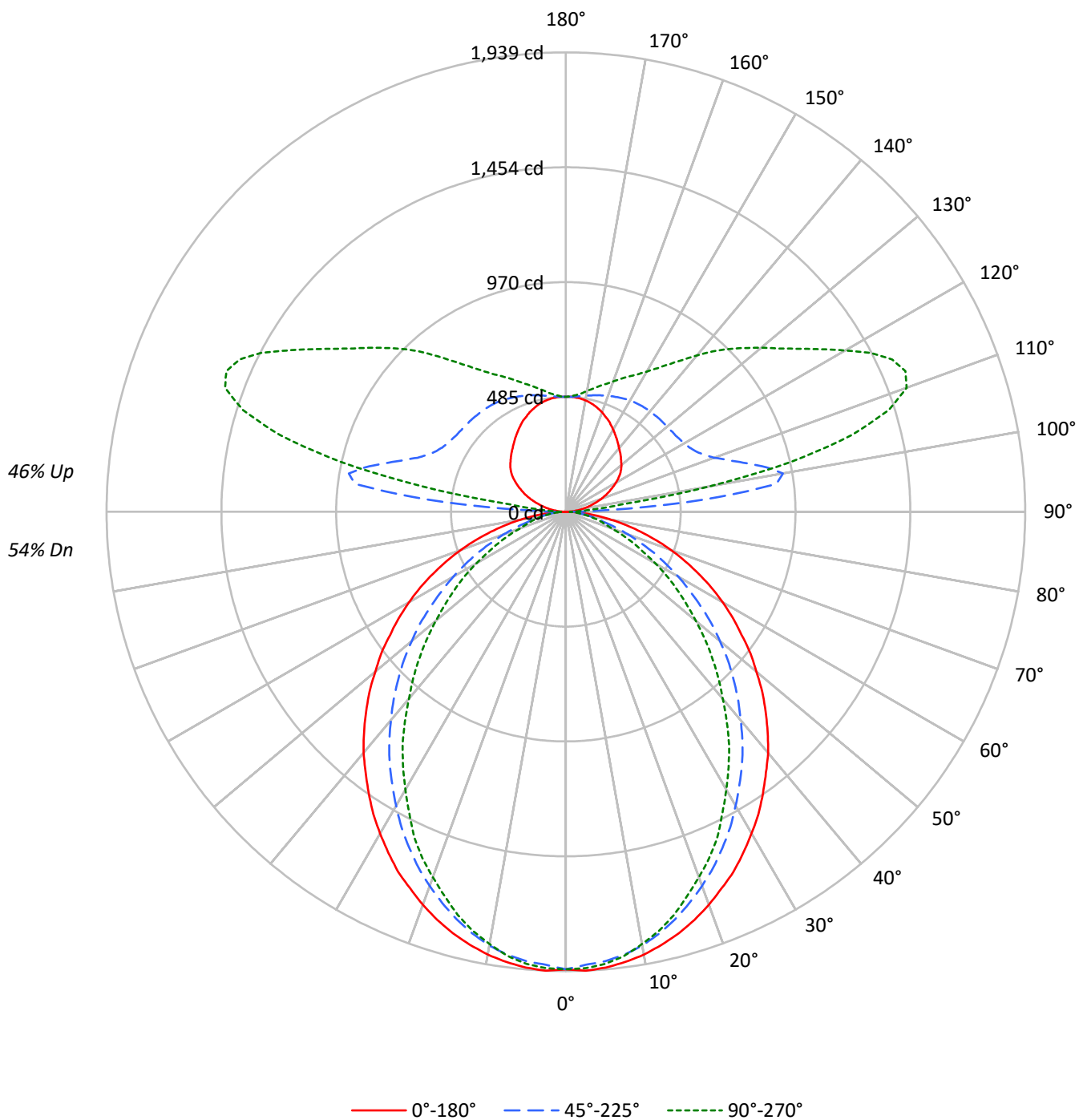
Lumens per Lamp: N/A
Luminaire Lumens: 8025.5 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44
3	83	74	66	61	77	69	62	57	59	54	50	51	47	44	43	40	38
4	76	65	58	52	70	61	54	49	53	48	43	45	41	38	38	35	33
5	70	58	50	44	65	55	47	42	47	42	38	41	37	33	35	31	29
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	28	26
7	60	48	40	34	55	45	37	32	39	33	29	34	29	26	29	25	23
8	55	43	36	30	51	41	34	29	36	30	26	31	27	23	27	23	21
9	52	40	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.3
10°-20°	505.0	6.3
20°-30°	727.2	9.1
30°-40°	818.9	10.2
40°-50°	783.3	9.8
50°-60°	641.2	8.0
60°-70°	432.3	5.4
70°-80°	216.8	2.7
80°-90°	59.4	0.7
90°-100°	275.8	3.4
100°-110°	771.0	9.6
110°-120°	751.8	9.4
120°-130°	598.6	7.5
130°-140°	472.5	5.9
140°-150°	352.5	4.4
150°-160°	246.0	3.1
160°-170°	144.5	1.8
170°-180°	47.0	0.6
0°-30°	1413.8	17.6
0°-40°	2232.6	27.8
0°-60°	3657.2	45.6
0°-90°	4365.7	54.4
90°-120°	1798.6	22.4
90°-150°	3222.4	40.2
90°-180°	3660.0	45.6
0°-180°	8025.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	2	12	25	28	28	8
95°	33	109	583	170	114	35
105°	114	168	790	1382	1250	121
115°	201	251	604	1325	1520	199
125°	280	331	564	1022	1199	249
135°	328	392	556	842	972	254
145°	374	429	549	690	760	235
155°	426	459	532	604	630	196
165°	465	478	509	540	549	131
175°	484	485	488	495	494	46
180°	485	485	485	485	485	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	2.0	11.8	24.6	27.5	28.5
92.5°	14.7	59.0	182.8	62.4	52.1
95°	33.4	108.6	582.7	170.0	114.0
97.5°	53.1	124.3	896.1	427.4	233.9
100°	72.7	137.0	930.5	894.2	616.1
102.5°	93.3	151.8	866.7	1197.3	975.7
105°	114.0	168.5	790.0	1381.6	1249.9
107.5°	135.6	188.2	722.2	1462.6	1428.7
110°	159.2	208.4	666.2	1465.1	1530.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.8	229.4	628.9	1409.6	1551.5
115°	201.4	251.0	604.3	1325.0	1520.1
117.5°	222.1	271.7	587.6	1234.6	1451.3
120°	243.7	292.3	576.8	1149.2	1360.9
122.5°	262.4	312.0	569.9	1081.9	1276.4
125°	280.0	330.6	564.0	1021.9	1198.8
127.5°	293.8	348.4	561.1	972.8	1132.0
130°	306.6	364.0	558.1	927.6	1076.9
132.5°	316.4	378.3	557.1	885.4	1022.9
135°	328.2	391.6	556.2	841.6	971.8
137.5°	339.0	402.4	554.2	800.3	917.8
140°	349.8	412.2	553.2	760.0	860.8
142.5°	361.6	421.0	551.2	723.2	807.7
145°	374.4	428.9	549.3	690.2	759.6
147.5°	387.1	437.2	546.3	664.8	718.3
150°	399.9	444.2	542.4	642.2	682.9
152.5°	412.7	451.6	537.5	622.5	653.4
155°	425.5	458.9	531.6	604.3	629.9
157.5°	435.3	465.3	526.7	586.6	607.3
160°	447.1	470.7	520.8	570.4	585.6
162.5°	455.9	474.6	514.9	555.2	566.0
165°	464.8	478.0	509.0	540.0	549.3
167.5°	471.7	481.0	503.1	526.7	532.6
170°	477.6	482.4	497.2	514.9	517.8
172.5°	481.5	483.9	492.3	504.6	504.1
175°	484.4	484.9	488.4	495.2	494.3
177.5°	486.4	485.4	485.4	489.3	487.4
180°	485.4	485.4	485.4	485.4	485.4

(END OF REPORT)