

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P199390

Luminaire Tested: **S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199390
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27883)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W
Description: DEFINE 2-INCH DIRECT/INDIRECT PENDANT LED LUMINAIRE
UPLIGHT LL1-3000K, SATIN WHITE DIFFUSER
DOWNLIGHT LL2-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6121.4 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

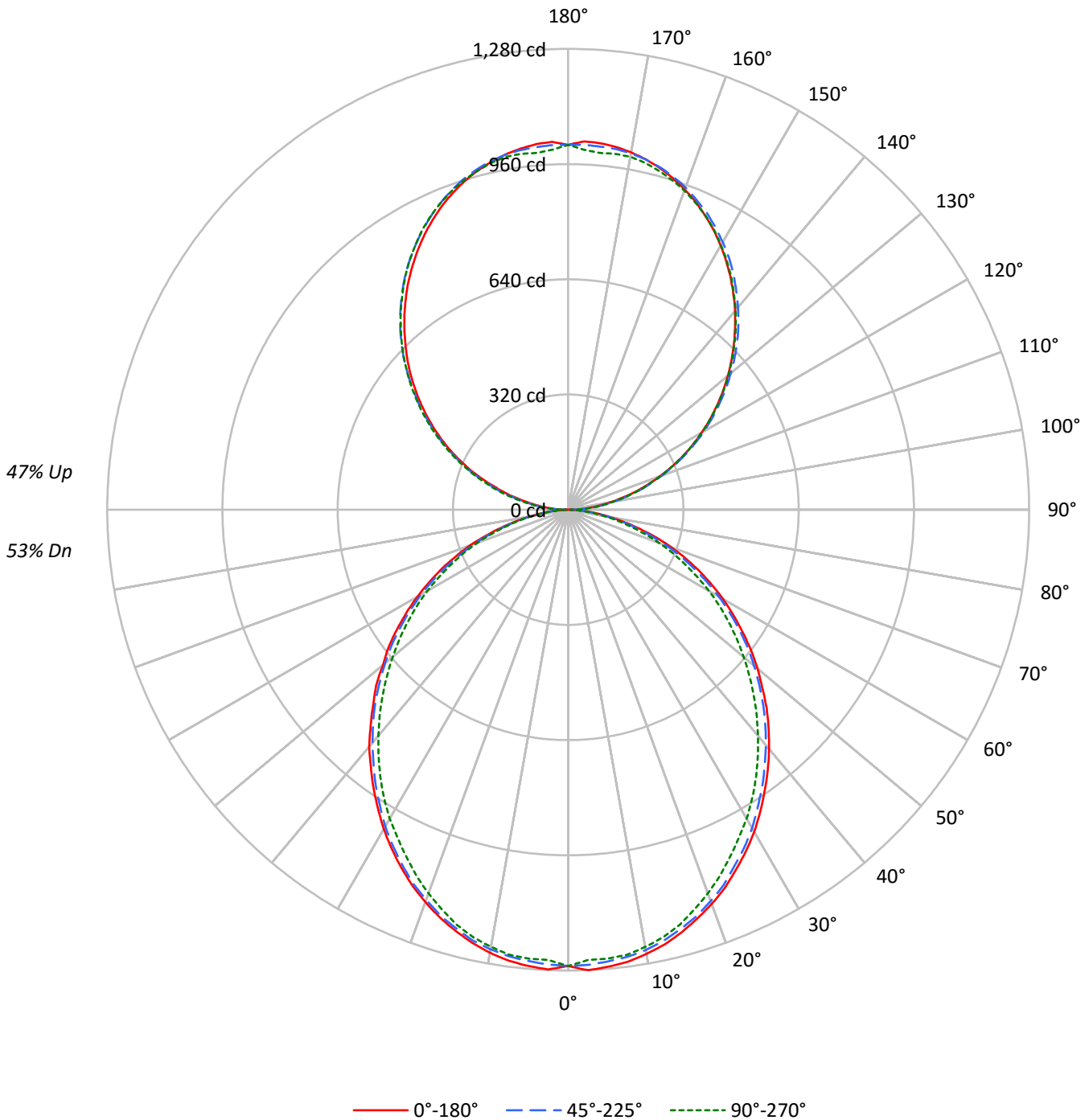
Input Watts (W): 67
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P199390

CATALOG NUMBER: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W

Luminous Intensity Polar Plot





TEST NUMBER: P199390

CATALOG NUMBER: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W

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	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45
2	90	82	76	71	83	76	71	67	66	62	58	55	53	50	46	44	42	38
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36	32
4	75	64	56	50	69	60	53	47	51	46	42	44	40	36	37	33	31	27
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	33	30	27	24
6	63	51	43	37	59	48	41	35	41	36	31	35	31	28	30	26	24	21
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19	17
9	51	38	31	26	47	36	29	25	31	26	22	27	23	20	23	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	20045	20045	20045
5°	20070	16604	20039
10°	19798	14179	19752
15°	19425	12196	19346
20°	18982	10494	18886
25°	18455	9057	18356
30°	17919	7872	17765
35°	17267	6812	17107
40°	16629	5859	16480
45°	15965	5012	15684
50°	15219	4252	14893
55°	14385	3560	14146
60°	13536	2919	13190
65°	12503	2292	12075
70°	11222	1723	10679
75°	9366	1160	8743
80°	6983	674	6342
85°	4338	266	3648



TEST NUMBER: P199390

CATALOG NUMBER: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	2.0
10°-20°	338.3	5.5
20°-30°	498.9	8.2
30°-40°	581.8	9.5
40°-50°	583.1	9.5
50°-60°	510.0	8.3
60°-70°	375.3	6.1
70°-80°	203.4	3.3
80°-90°	52.1	0.9
90°-100°	70.5	1.2
100°-110°	206.2	3.4
110°-120°	346.7	5.7
120°-130°	452.2	7.4
130°-140°	504.1	8.2
140°-150°	493.0	8.1
150°-160°	414.7	6.8
160°-170°	275.7	4.5
170°-180°	96.0	1.6
0°-30°	956.7	15.6
0°-40°	1538.5	25.1
0°-60°	2631.6	43.0
0°-90°	3262.4	53.3
90°-120°	623.4	10.2
90°-150°	2072.7	33.9
90°-180°	2859.0	46.7
0°-180°	6121.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1267	1267	1267	1267	1267	
5°	1274	1260	1252	1259	1272	121
15°	1216	1206	1194	1204	1211	343
25°	1103	1092	1064	1089	1097	508
35°	952	939	909	932	943	596
45°	779	766	728	758	766	600
55°	590	579	544	568	580	528
65°	400	384	357	372	386	396
75°	206	196	178	183	192	219
85°	49	46	39	40	41	55
90°	2	5	7	6	1	9
95°	59	67	67	63	55	61
105°	193	202	199	192	182	204
115°	351	356	351	346	338	346
125°	504	513	506	502	493	451
135°	651	664	653	656	638	502
145°	786	799	789	790	773	492
155°	901	910	901	901	889	415
165°	982	984	974	979	974	277
175°	1022	1012	995	1011	1019	97
180°	1013	1013	1013	1013	1013	



TEST NUMBER: P199390

CATALOG NUMBER: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1267.4	1267.4	1267.4	1267.4	1267.4	1267.4	1267.4	1267.4	1267.4
2.5°	1280.2	1262.5	1265.5	1261.6	1251.7	1260.6	1264.5	1261.6	1278.2
5°	1274.3	1256.7	1259.6	1254.7	1251.7	1254.7	1258.6	1254.7	1272.3
7.5°	1266.5	1246.8	1252.7	1249.8	1246.8	1248.8	1251.7	1244.9	1263.5
10°	1252.7	1233.1	1241.9	1236.1	1233.1	1235.1	1240.0	1230.2	1249.8
12.5°	1237.0	1217.4	1226.3	1219.4	1216.5	1216.5	1225.3	1214.5	1232.1
15°	1215.5	1199.8	1205.7	1198.8	1193.9	1196.9	1203.7	1195.9	1210.6
17.5°	1191.0	1177.3	1184.1	1173.3	1164.5	1171.4	1181.2	1172.4	1187.1
20°	1165.5	1149.8	1156.7	1142.0	1134.1	1140.0	1152.7	1145.9	1159.6
22.5°	1137.1	1122.4	1128.2	1108.6	1100.8	1105.7	1124.3	1117.5	1130.2
25°	1102.8	1091.0	1092.0	1072.4	1063.5	1069.4	1089.0	1085.1	1096.9
27.5°	1069.4	1057.7	1058.6	1036.1	1026.3	1034.1	1053.7	1050.8	1061.6
30°	1033.2	1022.4	1021.4	998.9	991.0	995.9	1015.5	1015.5	1024.3
32.5°	993.0	984.1	979.2	958.7	950.8	956.7	973.4	976.3	983.2
35°	951.8	945.9	939.1	919.5	908.7	916.5	932.2	936.1	943.0
37.5°	910.6	903.8	895.9	876.3	864.6	874.4	888.1	894.9	899.8
40°	867.5	862.6	853.8	834.2	819.5	829.3	845.0	852.8	859.7
42.5°	823.4	820.4	809.7	789.1	774.4	785.2	801.8	808.7	811.6
45°	779.3	775.4	765.6	744.0	728.3	740.1	757.7	764.6	765.6
47.5°	730.3	731.2	719.5	697.9	682.2	694.0	709.7	719.5	723.4
50°	686.2	687.1	673.4	651.9	636.2	645.0	663.6	673.4	671.5
52.5°	639.1	642.0	627.3	605.8	590.1	598.9	617.5	628.3	629.3
55°	590.1	595.0	579.3	557.7	544.0	552.8	568.5	581.3	580.3
57.5°	543.0	547.0	531.3	511.7	498.0	505.8	519.5	536.2	532.3
60°	496.0	499.9	483.3	463.6	451.9	455.8	471.5	485.2	483.3
62.5°	448.0	451.9	434.2	416.6	402.9	408.8	422.5	439.1	434.2
65°	399.9	402.9	384.2	368.6	356.8	362.7	372.5	390.1	386.2
67.5°	351.9	353.9	337.2	322.5	312.7	315.6	324.5	339.2	337.2
70°	303.9	305.8	290.1	276.4	267.6	270.5	277.4	291.1	289.2
72.5°	254.9	257.8	242.1	229.4	220.6	223.5	228.4	241.1	238.2
75°	205.8	207.8	196.0	186.2	178.4	179.4	183.3	193.1	192.1
77.5°	160.8	165.7	152.9	144.1	138.2	139.2	144.1	149.0	147.0
80°	116.6	122.5	113.7	106.8	101.9	101.0	104.9	108.8	105.9
82.5°	82.3	83.3	77.4	72.5	67.6	67.6	70.6	73.5	70.6
85°	49.0	51.0	46.1	42.1	39.2	38.2	40.2	43.1	41.2
87.5°	23.5	24.5	19.6	17.6	14.7	13.7	14.7	16.7	16.7
90°	2.0	4.9	4.9	5.9	6.9	6.9	5.9	5.9	1.0
92.5°	36.8	40.8	42.9	41.5	40.8	38.8	38.8	36.8	32.7
95°	58.6	64.7	67.4	66.7	66.7	64.0	63.3	61.3	55.1
97.5°	86.5	93.3	95.3	96.0	95.3	91.9	89.9	87.8	81.0
100°	118.5	125.3	127.3	127.3	126.6	123.2	120.5	117.8	110.3
102.5°	153.9	160.7	162.7	161.4	161.4	156.6	153.9	151.8	143.7
105°	193.4	200.2	201.5	199.5	198.8	194.0	192.0	189.3	181.8
107.5°	231.5	238.3	237.6	236.9	234.2	230.8	229.4	225.4	215.8
110°	271.0	279.8	276.4	275.1	272.3	268.9	267.6	266.2	258.7



TEST NUMBER: P199390

CATALOG NUMBER: S122-DIP-U1-2-30-X-X0048-1D-UDD-1-5-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	310.5	320.0	315.9	314.5	311.1	307.1	307.1	306.4	298.9
115°	350.6	360.2	356.1	353.4	350.6	346.5	345.9	346.5	338.4
117.5°	389.4	400.3	395.6	392.2	389.4	384.7	385.4	386.7	377.9
120°	428.2	440.5	435.1	431.0	428.9	423.5	424.2	426.9	416.7
122.5°	466.4	478.6	473.9	469.8	467.7	461.6	463.0	464.3	454.8
125°	504.5	516.8	512.7	507.9	505.9	501.8	502.5	502.5	492.9
127.5°	541.9	554.2	551.5	546.0	543.3	537.9	540.6	538.5	530.4
130°	578.7	590.3	588.9	582.8	580.7	577.3	579.4	573.3	567.1
132.5°	614.8	626.4	627.0	620.2	617.5	614.1	618.2	611.4	603.2
135°	650.9	661.1	663.8	656.3	652.9	650.2	655.6	644.7	637.9
137.5°	685.6	693.8	699.9	691.0	688.3	683.6	690.4	679.5	673.3
140°	721.0	727.8	733.3	726.4	723.0	719.0	724.4	713.5	707.4
142.5°	753.7	761.2	766.6	759.8	755.7	752.3	757.8	746.2	740.7
145°	786.4	792.5	799.3	793.2	789.1	785.7	790.4	778.9	773.4
147.5°	817.0	822.4	830.6	823.8	819.7	817.0	820.4	808.8	804.1
150°	847.0	849.7	857.8	853.8	848.3	845.6	848.3	838.1	834.0
152.5°	874.9	876.9	884.4	879.6	876.9	872.1	875.5	865.3	862.6
155°	900.7	901.4	910.3	904.8	901.4	898.0	900.7	892.6	889.2
157.5°	925.2	925.2	931.4	928.7	923.2	921.8	923.9	915.0	914.4
160°	946.4	945.0	952.5	947.7	943.0	941.6	945.0	936.8	936.1
162.5°	966.1	963.4	970.2	964.1	960.0	958.6	963.4	955.9	956.6
165°	982.4	979.0	984.5	978.4	974.3	973.6	979.0	971.5	974.3
167.5°	996.7	991.3	996.1	989.9	986.5	985.8	992.0	985.2	989.2
170°	1007.6	1000.8	1004.9	996.7	995.4	994.0	1001.5	995.4	1002.2
172.5°	1016.5	1009.0	1010.4	1001.5	996.7	999.5	1007.6	1004.2	1011.7
175°	1021.9	1013.8	1012.4	1002.9	994.7	1000.8	1011.0	1010.4	1019.2
177.5°	1024.0	1016.5	1014.4	1003.5	1000.8	1002.2	1013.8	1014.4	1022.6
180°	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1	1013.1

(END OF REPORT)