

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: P199385

Luminaire Tested: **S122-DIW-U1-1-30-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199385
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27883 P27986)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-DIW-U1-1-30-0048-1D-UDD-1-NA-W
Description: DEFINE 2-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LL1-3000K, NO LENS
DOWNLIGHT LL1-3000K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

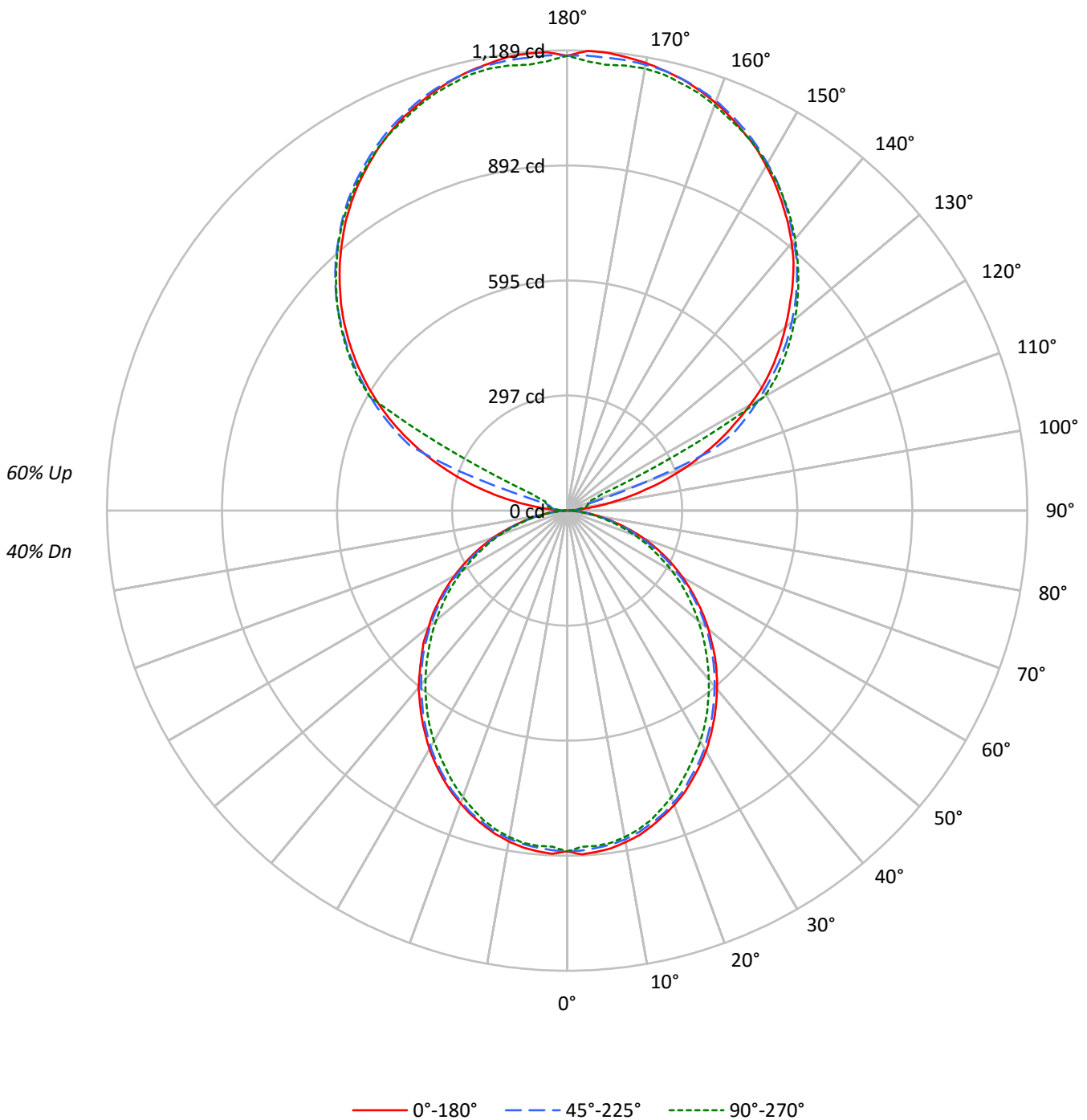
Lumens per Lamp: N/A
Luminaire Lumens: 5600.6 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.17 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4.08' x H: 0.38')
CIE Type: General Diffuse

Input Watts (W): 52
Input Voltage (V): NR
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: 25 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	40
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29
3	79	70	63	57	72	64	58	53	53	48	45	42	39	37	33	31	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	22	18
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	25	21	19	20	17	15	13
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	14	11
10	46	34	27	22	42	31	25	20	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13923	13923	13923
5°	13940	11533	13918
10°	13751	9848	13720
15°	13491	8472	13437
20°	13184	7289	13117
25°	12817	6291	12750
30°	12446	5468	12340
35°	11993	4731	11883
40°	11549	4069	11446
45°	11089	3482	10892
50°	10570	2954	10344
55°	9992	2473	9826
60°	9402	2028	9159
65°	8686	1592	8386
70°	7795	1197	7415
75°	6508	806	6071
80°	4851	469	4402
85°	3010	185	2532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	1.5
10°-20°	235.0	4.2
20°-30°	346.5	6.2
30°-40°	404.1	7.2
40°-50°	405.0	7.2
50°-60°	354.3	6.3
60°-70°	260.6	4.7
70°-80°	141.3	2.5
80°-90°	36.2	0.6
90°-100°	29.1	0.5
100°-110°	132.0	2.4
110°-120°	383.6	6.8
120°-130°	599.4	10.7
130°-140°	646.2	11.5
140°-150°	610.7	10.9
150°-160°	498.0	8.9
160°-170°	324.1	5.8
170°-180°	111.7	2.0
0°-30°	664.5	11.9
0°-40°	1068.6	19.1
0°-60°	1827.8	32.6
0°-90°	2266.0	40.5
90°-120°	544.7	9.7
90°-150°	2400.9	42.9
90°-180°	3335.0	59.5
0°-180°	5600.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	880	880	880	880	880	
5°	885	875	869	874	884	84
15°	844	837	829	836	841	238
25°	766	758	739	756	762	353
35°	661	652	631	648	655	414
45°	541	532	506	526	532	417
55°	410	402	378	395	403	367
65°	278	267	248	259	268	275
75°	143	136	124	127	133	152
85°	34	32	27	28	29	38
90°	1	3	5	4	1	3
95°	29	23	27	27	50	40
105°	212	45	54	46	249	225
115°	438	475	97	491	468	431
125°	648	668	684	679	664	577
135°	824	840	845	848	831	635
145°	969	978	979	984	972	607
155°	1079	1086	1078	1087	1080	498
165°	1153	1154	1142	1152	1151	325
175°	1187	1174	1156	1174	1185	113
180°	1175	1175	1175	1175	1175	



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CATALOG NUMBER: S122-DIW-U1-1-30-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	880.3	880.3	880.3	880.3	880.3	880.3	880.3	880.3	880.3
2.5°	889.2	876.9	879.0	876.2	869.4	875.5	878.3	876.2	887.8
5°	885.1	872.8	874.9	871.5	869.4	871.5	874.2	871.5	883.7
7.5°	879.6	866.0	870.1	868.1	866.0	867.4	869.4	864.7	877.6
10°	870.1	856.5	862.6	858.5	856.5	857.8	861.3	854.4	868.1
12.5°	859.2	845.6	851.7	847.0	844.9	844.9	851.0	843.6	855.8
15°	844.2	833.3	837.4	832.7	829.3	831.3	836.1	830.6	840.8
17.5°	827.2	817.7	822.4	815.0	808.8	813.6	820.4	814.3	824.5
20°	809.5	798.6	803.4	793.2	787.7	791.8	800.7	795.9	805.4
22.5°	789.8	779.6	783.6	770.0	764.6	768.0	780.9	776.1	785.0
25°	765.9	757.8	758.4	744.8	738.7	742.8	756.4	753.7	761.9
27.5°	742.8	734.6	735.3	719.6	712.8	718.3	731.9	729.9	737.3
30°	717.6	710.1	709.4	693.8	688.3	691.7	705.3	705.3	711.5
32.5°	689.7	683.6	680.2	665.9	660.4	664.5	676.1	678.1	682.9
35°	661.1	657.0	652.2	638.6	631.1	636.6	647.5	650.2	655.0
37.5°	632.5	627.7	622.3	608.7	600.5	607.3	616.8	621.6	625.0
40°	602.5	599.1	593.0	579.4	569.2	576.0	586.9	592.3	597.1
42.5°	571.9	569.9	562.4	548.1	537.9	545.3	556.9	561.7	563.7
45°	541.3	538.5	531.7	516.8	505.9	514.0	526.3	531.0	531.7
47.5°	507.2	507.9	499.7	484.8	473.9	482.0	492.9	499.7	502.5
50°	476.6	477.3	467.7	452.8	441.9	448.0	460.9	467.7	466.4
52.5°	443.9	445.9	435.7	420.8	409.9	416.0	428.9	436.4	437.1
55°	409.9	413.3	402.4	387.4	377.9	384.0	394.9	403.7	403.1
57.5°	377.2	379.9	369.0	355.4	345.9	351.3	360.8	372.4	369.7
60°	344.5	347.2	335.6	322.0	313.9	316.6	327.5	337.0	335.6
62.5°	311.1	313.9	301.6	289.4	279.8	283.9	293.4	305.0	301.6
65°	277.8	279.8	266.9	256.0	247.8	251.9	258.7	271.0	268.2
67.5°	244.4	245.8	234.2	224.0	217.2	219.2	225.4	235.6	234.2
70°	211.1	212.4	201.5	192.0	185.9	187.9	192.7	202.2	200.8
72.5°	177.0	179.1	168.2	159.3	153.2	155.2	158.6	167.5	165.4
75°	143.0	144.3	136.2	129.4	123.9	124.6	127.3	134.1	133.4
77.5°	111.7	115.1	106.2	100.1	96.0	96.7	100.1	103.5	102.1
80°	81.0	85.1	79.0	74.2	70.8	70.1	72.8	75.6	73.5
82.5°	57.2	57.9	53.8	50.4	47.0	47.0	49.0	51.1	49.0
85°	34.0	35.4	32.0	29.3	27.2	26.6	27.9	30.0	28.6
87.5°	16.3	17.0	13.6	12.3	10.2	9.5	10.2	11.6	11.6
90°	1.4	3.4	3.4	4.1	4.8	4.8	4.1	4.1	0.7
92.5°	4.1	9.5	9.5	11.6	12.3	14.3	16.3	17.0	18.4
95°	28.6	20.4	23.1	25.2	26.6	28.6	27.2	25.2	49.7
97.5°	64.0	25.9	32.7	34.0	36.1	36.8	36.8	28.6	90.6
100°	106.9	30.0	38.8	44.3	45.6	45.6	41.5	64.0	139.6
102.5°	157.3	133.4	42.2	49.0	51.7	49.7	44.3	217.2	194.0
105°	211.7	240.3	44.9	51.7	54.5	53.1	46.3	267.6	249.2
107.5°	268.9	291.4	47.7	54.5	57.2	55.1	56.5	319.3	304.3
110°	326.1	345.2	213.8	56.5	59.2	56.5	296.2	371.7	359.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	380.6	400.3	401.7	59.9	60.6	64.7	440.5	424.8	414.6
115°	437.8	454.1	475.2	276.4	96.7	304.3	490.9	477.3	468.4
117.5°	490.2	505.9	522.2	486.1	370.4	529.0	539.2	529.0	520.2
120°	545.3	561.0	571.2	587.6	588.9	588.9	586.9	578.7	569.2
122.5°	599.8	610.0	618.2	634.5	640.0	633.9	632.5	625.0	617.5
125°	647.5	657.0	667.9	678.8	684.2	678.1	678.8	669.3	663.8
127.5°	692.4	700.6	714.9	721.7	727.1	720.3	723.0	712.8	708.7
130°	736.0	741.4	757.8	763.2	768.0	763.9	765.9	755.0	751.6
132.5°	778.9	786.4	800.0	802.0	807.5	801.3	808.8	793.8	792.5
135°	823.8	829.9	840.1	840.8	844.9	841.5	847.6	835.4	831.3
137.5°	866.0	868.7	877.6	874.9	881.0	875.5	884.4	872.1	869.4
140°	902.8	904.8	911.0	912.3	916.4	911.6	918.4	906.2	904.8
142.5°	936.8	939.5	945.0	944.3	949.1	944.3	952.5	941.6	940.2
145°	968.8	972.9	977.7	975.6	979.0	976.3	984.5	972.9	972.2
147.5°	1000.8	1002.2	1009.0	1005.6	1007.6	1004.2	1013.1	1003.5	1002.2
150°	1028.7	1031.5	1035.5	1031.5	1032.1	1030.1	1038.9	1030.8	1029.4
152.5°	1056.7	1056.0	1062.1	1053.9	1057.3	1053.9	1064.1	1056.0	1056.0
155°	1079.1	1078.4	1085.9	1077.1	1078.4	1075.7	1087.3	1077.8	1079.8
157.5°	1101.6	1098.2	1107.0	1098.2	1095.5	1097.5	1106.4	1097.5	1101.6
160°	1121.3	1117.9	1126.1	1116.6	1114.5	1115.9	1125.4	1117.2	1118.6
162.5°	1138.4	1133.6	1141.1	1130.9	1130.9	1128.8	1141.1	1132.9	1137.0
165°	1153.3	1147.9	1154.0	1143.8	1142.4	1141.1	1152.0	1146.5	1150.6
167.5°	1164.2	1158.8	1164.2	1152.6	1154.0	1151.3	1162.2	1158.8	1163.5
170°	1174.4	1167.6	1169.7	1159.5	1159.5	1157.4	1169.0	1165.6	1172.4
172.5°	1181.2	1173.8	1173.8	1162.2	1159.5	1160.8	1173.1	1172.4	1181.9
175°	1187.4	1177.2	1174.4	1163.5	1156.1	1162.9	1174.4	1176.5	1185.3
177.5°	1188.7	1179.2	1176.5	1164.2	1162.2	1162.9	1177.2	1177.8	1185.3
180°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.1	1175.1	1175.1	1175.1

(END OF REPORT)