

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: P243118

Luminaire Tested: **S122DR-H865D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H865D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3133.4 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

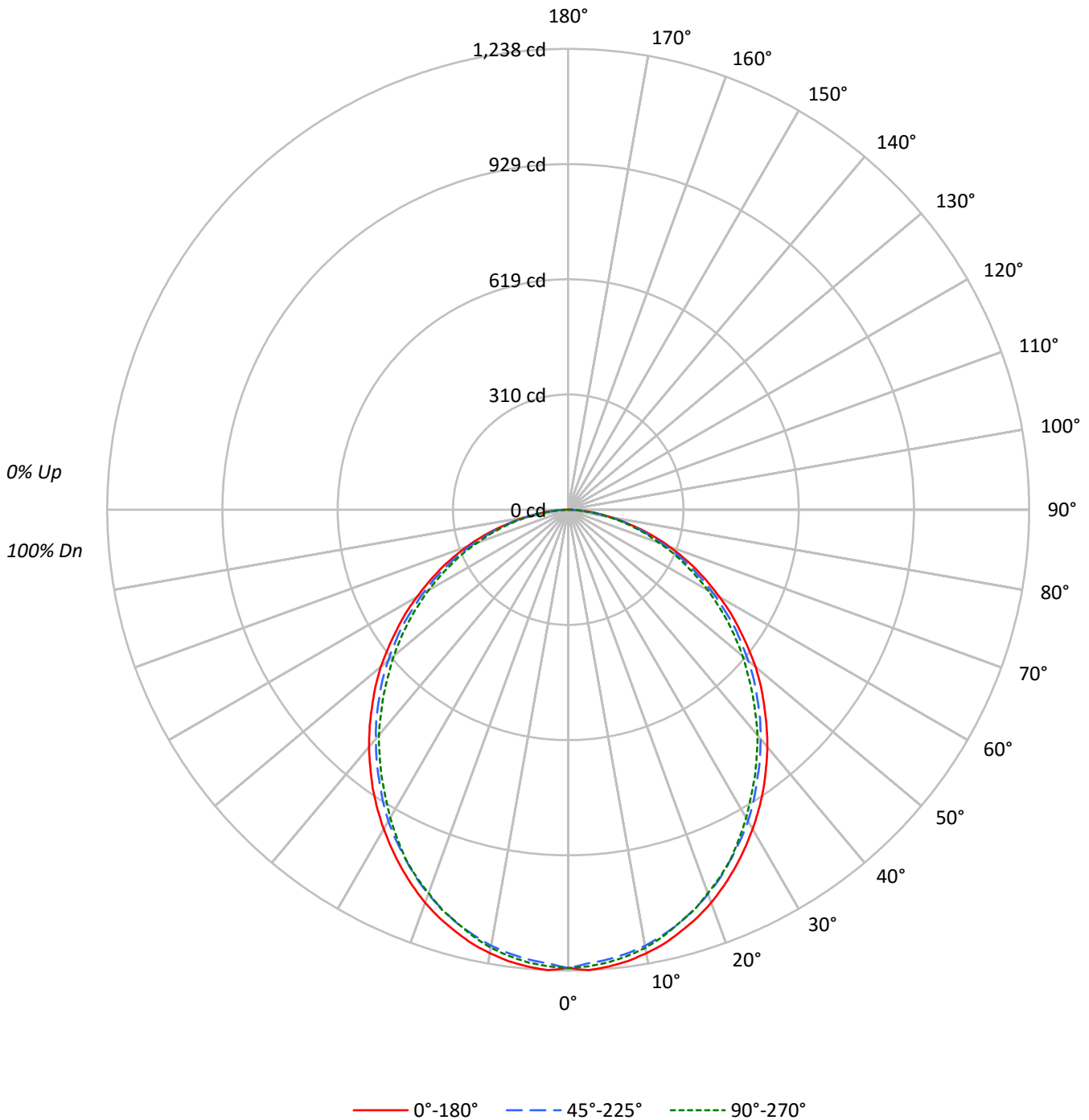
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23455	23455	23455
5°	23566	23197	23350
10°	23399	23005	23115
15°	23119	22693	22672
20°	22776	22269	22222
25°	22301	21752	21729
30°	21792	21242	21018
35°	21269	20584	20321
40°	20685	19979	19668
45°	20055	19352	18862
50°	19472	18698	18126
55°	18657	18016	17338
60°	17855	17166	16514
65°	17086	16266	15549
70°	16056	15232	14474
75°	14616	14035	13365
80°	12702	12329	11825
85°	10906	9682	8939



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	3.7
10°-20°	326.4	10.4
20°-30°	479.8	15.3
30°-40°	557.1	17.8
40°-50°	556.4	17.8
50°-60°	484.6	15.5
60°-70°	358.4	11.4
70°-80°	202.0	6.4
80°-90°	52.7	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	922.1	29.4
0°-40°	1479.3	47.2
0°-60°	2520.3	80.4
0°-90°	3133.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3133.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1232	1227	1213	1223	1221	117
15°	1172	1167	1151	1155	1150	331
25°	1061	1052	1035	1034	1034	489
35°	915	904	885	877	874	572
45°	744	737	718	707	700	575
55°	562	557	542	528	522	503
65°	379	373	361	350	345	375
75°	199	198	191	184	182	211
85°	50	48	44	42	41	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.4	1231.4	1231.4	1231.4	1231.4
2.5°	1238.2	1232.5	1220.0	1230.2	1228.0
5°	1232.5	1226.8	1213.2	1223.4	1221.2
7.5°	1223.4	1217.8	1203.0	1213.2	1209.8
10°	1209.8	1203.0	1189.4	1196.2	1195.1
12.5°	1193.9	1187.1	1171.2	1176.9	1174.6
15°	1172.4	1166.7	1150.8	1155.3	1149.7
17.5°	1149.7	1140.6	1125.8	1130.4	1127.0
20°	1123.6	1114.5	1098.6	1100.9	1096.3
22.5°	1092.9	1083.8	1069.1	1069.1	1066.8
25°	1061.1	1052.1	1035.0	1033.9	1033.9
27.5°	1026.0	1018.0	1001.0	997.6	995.3
30°	990.8	984.0	965.8	959.0	955.6
32.5°	953.3	944.2	927.2	919.3	913.6
35°	914.7	904.5	885.2	877.3	873.9
37.5°	872.8	862.5	845.5	838.7	831.9
40°	831.9	822.8	803.5	793.3	791.0
42.5°	788.8	779.7	762.7	751.3	744.5
45°	744.5	736.6	718.4	707.1	700.2
47.5°	701.4	692.3	676.4	662.8	653.7
50°	657.1	648.0	631.0	615.1	611.7
52.5°	608.3	602.6	585.6	570.9	566.3
55°	561.8	557.2	542.5	527.7	522.1
57.5°	517.5	511.8	494.8	483.5	476.7
60°	468.7	465.3	450.6	438.1	433.5
62.5°	423.3	418.8	406.3	393.8	388.1
65°	379.1	373.4	360.9	349.6	345.0
67.5°	333.7	328.0	317.8	308.7	304.2
70°	288.3	283.7	273.5	265.6	259.9
72.5°	244.0	239.5	230.4	222.4	221.3
75°	198.6	197.5	190.7	183.9	181.6
77.5°	156.6	155.5	150.9	147.5	145.3
80°	115.8	115.8	112.4	109.0	107.8
82.5°	79.4	80.6	77.2	74.9	74.9
85°	49.9	47.7	44.3	42.0	40.9
87.5°	20.4	17.0	15.9	12.5	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)