

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: P243142

Luminaire Tested: **S122DR-H865D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243142
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-H865D940-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2964.4 lumens
Efficiency: N/A
Efficacy: 94.1 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

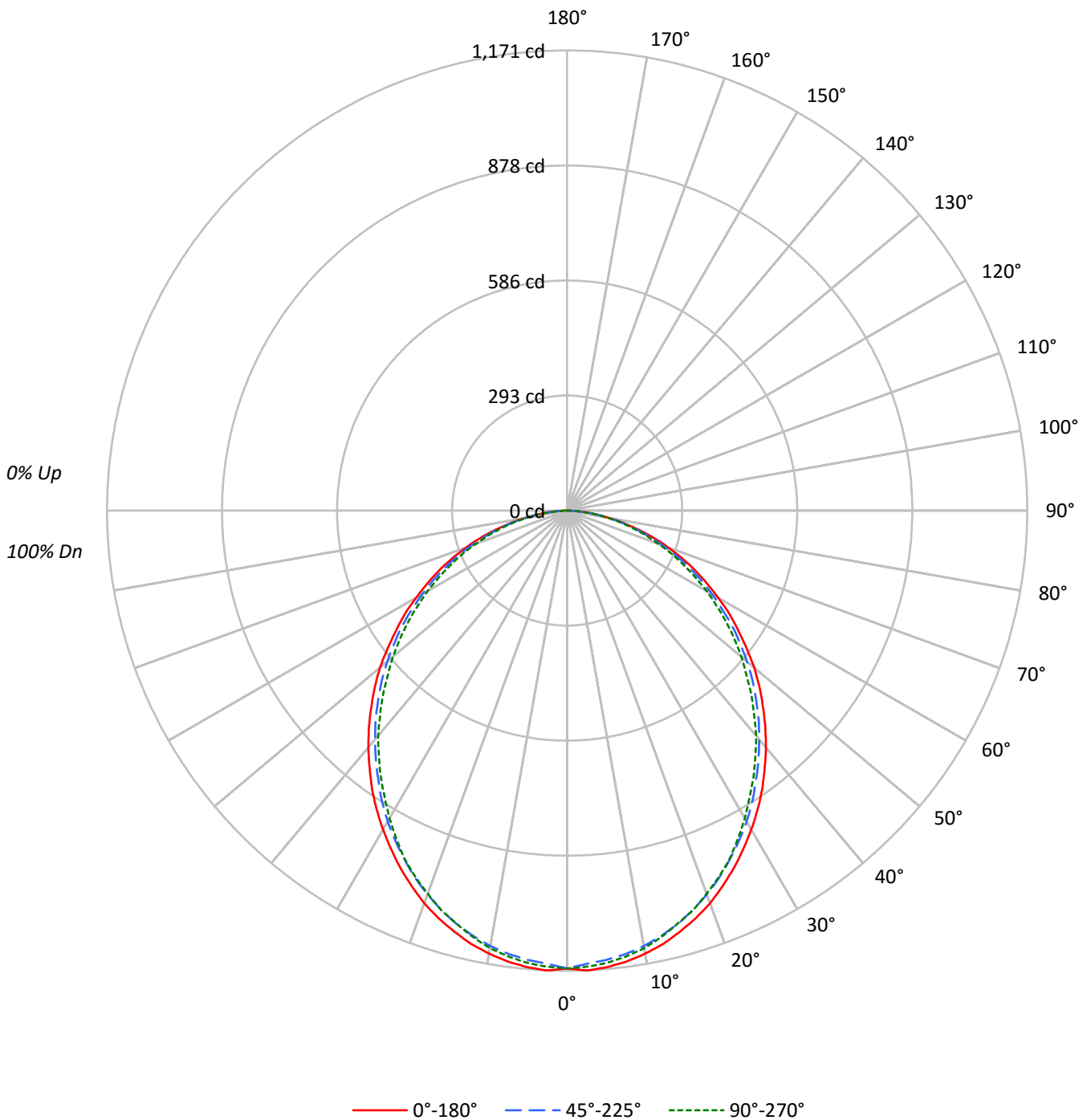
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22191	22191	22191
5°	22294	21946	22090
10°	22138	21763	21868
15°	21871	21469	21449
20°	21547	21069	21024
25°	21099	20580	20557
30°	20615	20096	19885
35°	20123	19474	19226
40°	19569	18902	18609
45°	18975	18309	17846
50°	18423	17691	17149
55°	17650	17043	16402
60°	16892	16240	15627
65°	16162	15387	14711
70°	15187	14413	13695
75°	13828	13276	12644
80°	12011	11660	11189
85°	10315	9157	8458



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	3.7
10°-20°	308.8	10.4
20°-30°	454.0	15.3
30°-40°	527.1	17.8
40°-50°	526.4	17.8
50°-60°	458.5	15.5
60°-70°	339.1	11.4
70°-80°	191.1	6.4
80°-90°	49.8	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°	872.4	29.4
0°-40°	1399.5	47.2
0°-60°	2384.4	80.4
0°-90°	2964.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2964.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1166	1161	1148	1158	1155	111
15°	1109	1104	1089	1093	1088	313
25°	1004	995	979	978	978	462
35°	865	856	838	830	827	541
45°	704	697	680	669	662	544
55°	532	527	513	499	494	476
65°	359	353	341	331	326	354
75°	188	187	180	174	172	200
85°	47	45	42	40	39	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.0	1165.0	1165.0	1165.0	1165.0
2.5°	1171.4	1166.0	1154.2	1163.9	1161.8
5°	1166.0	1160.7	1147.8	1157.5	1155.3
7.5°	1157.5	1152.1	1138.1	1147.8	1144.6
10°	1144.6	1138.1	1125.2	1131.7	1130.6
12.5°	1129.5	1123.1	1108.1	1113.4	1111.3
15°	1109.1	1103.8	1088.7	1093.0	1087.7
17.5°	1087.7	1079.1	1065.1	1069.4	1066.2
20°	1063.0	1054.4	1039.4	1041.5	1037.2
22.5°	1034.0	1025.4	1011.4	1011.4	1009.3
25°	1003.9	995.3	979.2	978.1	978.1
27.5°	970.6	963.1	947.0	943.8	941.6
30°	937.3	930.9	913.7	907.3	904.1
32.5°	901.9	893.3	877.2	869.7	864.3
35°	865.4	855.7	837.5	830.0	826.8
37.5°	825.7	816.0	799.9	793.5	787.0
40°	787.0	778.4	760.2	750.5	748.4
42.5°	746.2	737.6	721.5	710.8	704.4
45°	704.4	696.8	679.7	668.9	662.5
47.5°	663.6	655.0	639.9	627.0	618.5
50°	621.7	613.1	597.0	582.0	578.7
52.5°	575.5	570.1	554.0	540.1	535.8
55°	531.5	527.2	513.2	499.3	493.9
57.5°	489.6	484.2	468.1	457.4	451.0
60°	443.4	440.2	426.3	414.5	410.2
62.5°	400.5	396.2	384.4	372.6	367.2
65°	358.6	353.3	341.4	330.7	326.4
67.5°	315.7	310.3	300.6	292.0	287.8
70°	272.7	268.4	258.8	251.2	245.9
72.5°	230.8	226.6	218.0	210.4	209.4
75°	187.9	186.8	180.4	173.9	171.8
77.5°	148.2	147.1	142.8	139.6	137.4
80°	109.5	109.5	106.3	103.1	102.0
82.5°	75.2	76.2	73.0	70.9	70.9
85°	47.2	45.1	41.9	39.7	38.7
87.5°	19.3	16.1	15.0	11.8	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)