

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: P243237

Luminaire Tested: **S122RDR-H290D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H290D935-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 856.8 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

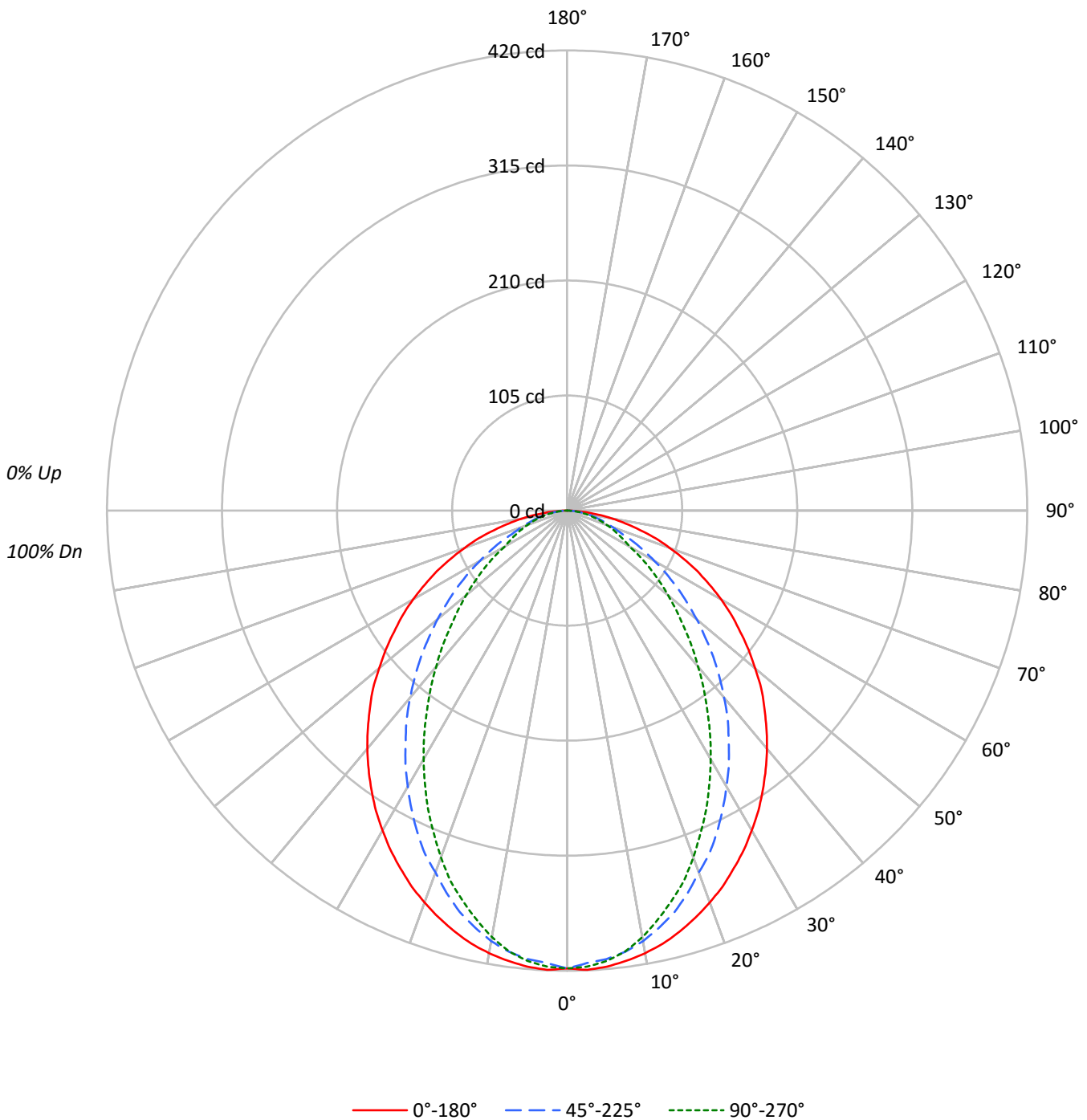
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7958	7958	7958
5°	7989	7857	7891
10°	7934	7717	7648
15°	7841	7478	7271
20°	7715	7123	6825
25°	7568	6803	6318
30°	7412	6398	5763
35°	7241	5976	5188
40°	7054	5540	4625
45°	6856	5078	4068
50°	6632	4572	3568
55°	6403	4071	3075
60°	6194	3501	2514
65°	5913	2957	2321
70°	5558	2450	2166
75°	5063	2230	1987
80°	4552	1974	1777
85°	3781	1661	1574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	4.6
10°-20°	107.2	12.5
20°-30°	150.4	17.6
30°-40°	163.9	19.1
40°-50°	150.6	17.6
50°-60°	118.2	13.8
60°-70°	77.1	9.0
70°-80°	39.9	4.7
80°-90°	10.3	1.2
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°	296.8	34.6
0°-40°	460.7	53.8
0°-60°	729.5	85.1
0°-90°	856.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	856.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	416	411	414	413	40
15°	398	393	379	372	369	112
25°	360	348	324	308	301	166
35°	311	291	257	233	223	195
45°	254	228	188	161	151	196
55°	193	164	123	100	93	173
65°	131	100	66	53	52	130
75°	69	43	30	28	27	74
85°	17	8	8	7	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	417.8	417.8	417.8	417.8	417.8
2.5°	419.6	417.8	413.4	417.4	416.7
5°	417.8	415.6	410.9	413.8	412.7
7.5°	414.5	412.3	406.2	407.7	405.9
10°	410.2	407.3	399.0	397.6	395.4
12.5°	404.8	400.8	389.6	385.3	382.4
15°	397.6	392.9	379.2	371.6	368.7
17.5°	389.6	382.8	365.8	357.2	354.3
20°	380.6	372.7	351.4	342.4	336.7
22.5°	371.3	361.2	339.2	325.1	318.3
25°	360.1	347.5	323.7	307.8	300.6
27.5°	349.3	334.5	307.5	289.1	281.1
30°	337.0	320.8	290.9	269.6	262.0
32.5°	324.8	306.0	274.7	251.6	242.9
35°	311.4	290.9	257.0	233.2	223.1
37.5°	297.7	276.5	240.8	214.5	204.7
40°	283.7	259.9	222.8	195.4	186.0
42.5°	269.2	245.1	205.8	177.7	168.7
45°	254.5	228.5	188.5	161.1	151.0
47.5°	240.4	212.3	170.8	144.9	135.2
50°	223.8	196.1	154.3	128.0	120.4
52.5°	208.7	179.9	138.0	112.8	106.3
55°	192.8	164.0	122.6	99.5	92.6
57.5°	178.1	147.4	107.1	86.1	79.7
60°	162.6	131.6	91.9	72.8	66.0
62.5°	146.3	115.3	78.6	60.6	58.4
65°	131.2	99.5	65.6	53.3	51.5
67.5°	115.0	84.7	52.3	46.9	45.1
70°	99.8	70.3	44.0	40.0	38.9
72.5°	85.1	56.6	37.1	33.9	32.8
75°	68.8	42.9	30.3	27.8	27.0
77.5°	54.8	30.3	24.1	22.3	21.6
80°	41.5	22.0	18.0	16.9	16.2
82.5°	28.5	14.8	12.6	11.9	11.5
85°	17.3	8.3	7.6	7.2	7.2
87.5°	6.8	3.2	3.2	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)