

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: P231729

Luminaire Tested: **S122-RDR-1-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33911)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122-RDR-1-35-X-0048-1-U-DD-1-W
Description: DEFINE 2 LED LINEAR REGRESSED DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2279.1 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.14' x L: 3.92' x H: 0')
CIE Type: Direct

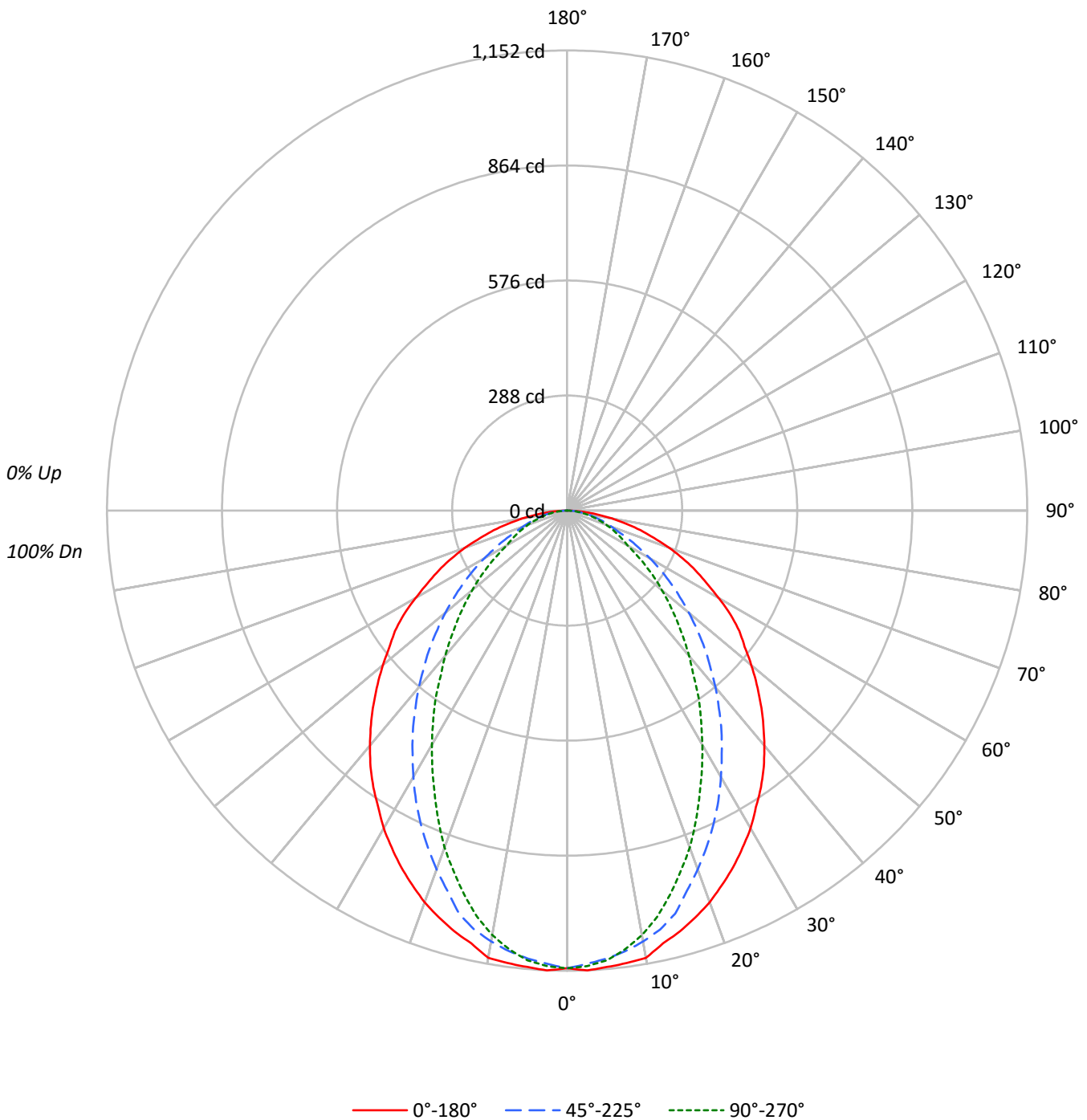
Input Watts (W): 27.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	100	100	100	100	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	86	86	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74	74	74	74	74	74	74		
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64	64	64	64	64	64	64		
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56	56	56	56	56	56	56		
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49	49	49	49	49	49	49		
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44	44	44	44	44	44	44		
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39	39	39	39	39	39	39		
8	64	51	43	38	63	51	43	38	49	43	38	48	42	37	47	41	37	35	35	35	35	35	35	35		
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32	32	32	32	32	32	32		
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29	29	29	29	29	29	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22492	22492	22492
5°	22600	22188	22275
10°	22664	21831	21504
15°	22168	21231	20227
20°	21801	19964	18749
25°	21319	18772	16987
30°	20817	17456	15339
35°	20271	16137	13767
40°	19678	14806	12162
45°	19030	13509	10766
50°	18384	12145	9461
55°	18009	10828	8197
60°	17208	9403	6859
65°	16480	7961	6429
70°	15634	6744	5992
75°	14411	6250	5499
80°	12785	5584	4963
85°	10879	4955	4460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	4.7
10°-20°	292.8	12.8
20°-30°	403.5	17.7
30°-40°	431.7	18.9
40°-50°	393.6	17.3
50°-60°	310.3	13.6
60°-70°	204.4	9.0
70°-80°	106.7	4.7
80°-90°	28.8	1.3
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°	803.7	35.3
0°-40°	1235.4	54.2
0°-60°	1939.3	85.1
0°-90°	2279.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2279.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1146	1146	1146	1146	1146	
5°	1147	1140	1126	1135	1130	109
15°	1091	1074	1045	1013	995	308
25°	984	947	867	812	784	453
35°	846	782	673	599	574	529
45°	686	605	487	412	388	529
55°	526	431	316	258	240	468
65°	355	262	171	142	138	350
75°	190	112	82	75	72	200
85°	48	24	22	21	20	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1145.8	1145.8	1145.8	1145.8	1145.8
2.5°	1152.4	1146.9	1135.9	1144.7	1141.4
5°	1146.9	1140.3	1126.0	1134.8	1130.4
7.5°	1142.5	1132.6	1112.8	1116.1	1108.4
10°	1137.0	1124.9	1095.2	1087.5	1078.8
12.5°	1109.5	1102.9	1074.4	1052.4	1041.4
15°	1090.8	1074.4	1044.7	1012.8	995.3
17.5°	1067.8	1049.1	997.5	966.7	945.8
20°	1043.6	1017.2	955.7	921.7	897.5
22.5°	1013.9	985.4	911.8	868.9	841.5
25°	984.3	946.9	866.7	811.8	784.3
27.5°	951.3	908.5	819.5	759.1	730.5
30°	918.4	867.8	770.1	704.2	676.7
32.5°	879.9	826.1	720.6	648.1	624.0
35°	845.9	782.2	673.4	598.7	574.5
37.5°	808.5	739.3	624.0	548.2	519.6
40°	767.9	694.3	577.8	500.9	474.6
42.5°	727.2	650.3	529.5	452.6	429.5
45°	685.5	605.3	486.6	411.9	387.8
47.5°	643.7	562.4	440.5	370.2	348.2
50°	602.0	518.5	397.7	331.8	309.8
52.5°	560.2	474.6	355.9	293.3	274.6
55°	526.2	430.6	316.4	258.2	239.5
57.5°	485.5	388.9	277.9	224.1	205.4
60°	438.3	344.9	239.5	187.8	174.7
62.5°	393.3	304.3	203.2	161.5	156.0
65°	354.8	262.5	171.4	141.7	138.4
67.5°	313.1	223.0	138.4	124.1	120.8
70°	272.4	184.6	117.5	106.6	104.4
72.5°	227.4	146.1	100.0	90.1	87.9
75°	190.0	112.0	82.4	74.7	72.5
77.5°	149.4	81.3	64.8	59.3	58.2
80°	113.1	59.3	49.4	46.1	43.9
82.5°	75.8	40.6	34.1	33.0	31.9
85°	48.3	24.2	22.0	20.9	19.8
87.5°	19.8	11.0	9.9	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)