

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: P242702

Luminaire Tested: **S124RDR-S350D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D830-X4F0-XX-UDD-F-W
Description: DEFINE 4 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1241.9 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

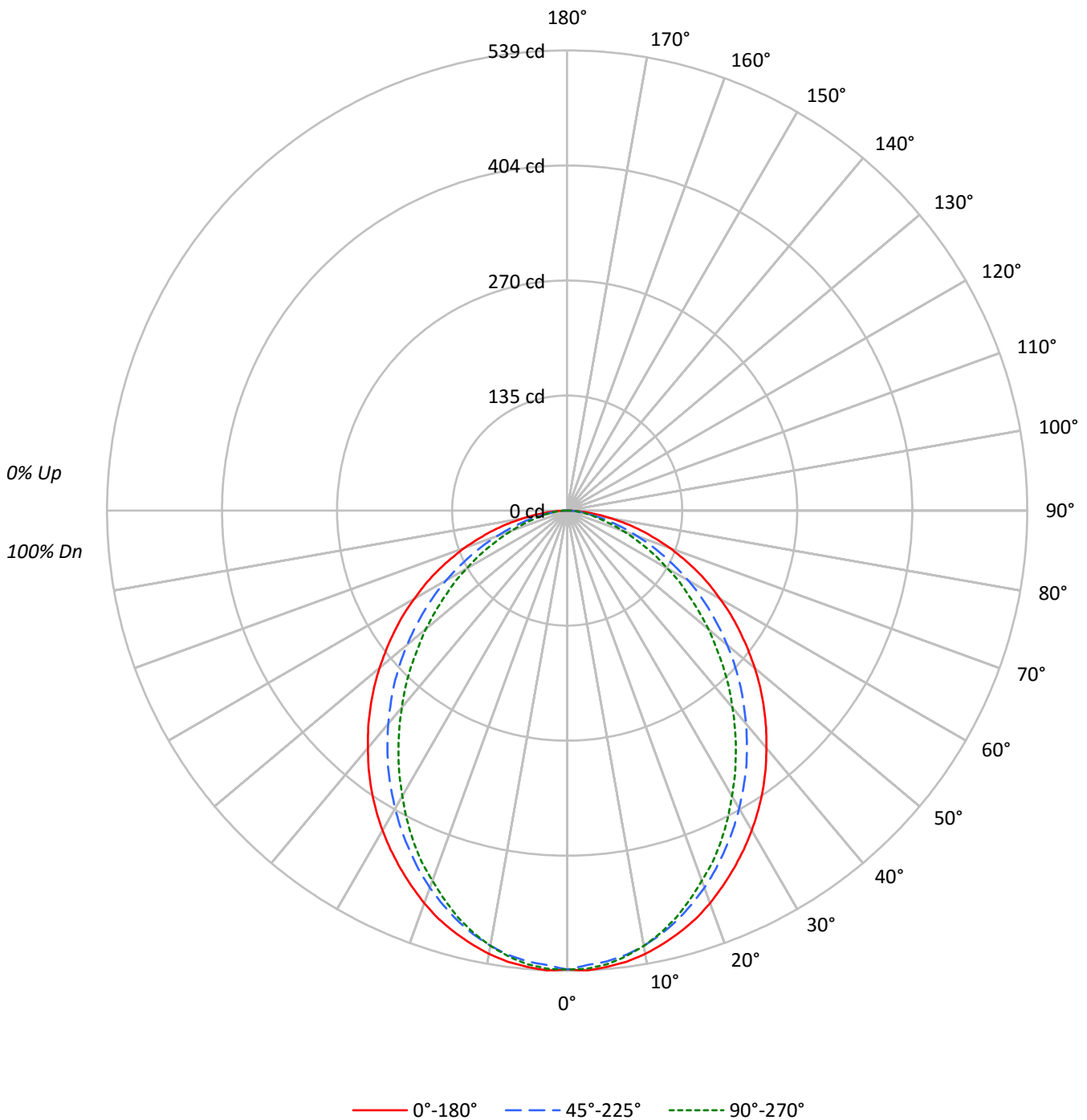
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72				72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62				62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	54				54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47				47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41				41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37				37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33				33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30				30
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4778	4778	4778
5°	4788	4730	4759
10°	4759	4673	4673
15°	4703	4575	4541
20°	4628	4446	4364
25°	4533	4295	4186
30°	4439	4135	3962
35°	4336	3971	3738
40°	4212	3782	3495
45°	4097	3595	3248
50°	3966	3381	2988
55°	3826	3157	2704
60°	3673	2912	2414
65°	3531	2606	2129
70°	3327	2266	1806
75°	3067	1879	1470
80°	2677	1433	1346
85°	2264	1305	1214



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	4.1
10°-20°	140.9	11.3
20°-30°	203.4	16.4
30°-40°	230.6	18.6
40°-50°	222.6	17.9
50°-60°	185.1	14.9
60°-70°	127.8	10.3
70°-80°	64.6	5.2
80°-90°	16.4	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°	394.9	31.8
0°-40°	625.5	50.4
0°-60°	1033.2	83.2
0°-90°	1241.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1241.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	537	535	530	534	533	51
15°	511	507	497	496	493	144
25°	462	455	438	431	427	213
35°	400	386	366	352	344	250
45°	326	311	286	266	258	251
55°	247	230	204	182	174	221
65°	168	150	124	106	101	166
75°	89	74	55	45	43	94
85°	22	14	13	12	12	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.5	537.5	537.5	537.5	537.5
2.5°	539.1	537.5	532.9	537.5	537.1
5°	536.6	535.0	530.1	534.2	533.4
7.5°	532.9	531.3	525.1	528.0	526.8
10°	527.2	525.1	517.7	519.4	517.7
12.5°	519.8	517.3	508.2	509.1	506.6
15°	511.1	507.4	497.1	496.3	493.4
17.5°	501.3	495.9	484.0	481.9	477.8
20°	489.3	484.0	470.0	466.7	461.3
22.5°	476.1	470.0	454.7	449.4	445.3
25°	462.2	454.7	437.9	430.9	426.8
27.5°	447.8	438.7	421.0	412.8	407.0
30°	432.5	422.2	402.9	392.6	386.0
32.5°	416.5	404.5	384.4	372.0	365.9
35°	399.6	386.4	365.9	351.9	344.5
37.5°	381.9	368.3	345.7	330.5	323.1
40°	363.0	349.4	325.9	308.7	301.2
42.5°	344.9	330.5	305.8	288.1	280.3
45°	325.9	310.7	286.0	265.9	258.4
47.5°	306.6	291.0	265.4	244.5	236.2
50°	286.8	270.8	244.5	223.9	216.1
52.5°	266.7	251.0	223.9	202.9	194.7
55°	246.9	230.5	203.7	182.3	174.5
57.5°	227.6	210.3	184.0	162.1	156.4
60°	206.6	190.1	163.8	142.4	135.8
62.5°	187.7	170.4	143.2	123.9	118.9
65°	167.9	150.2	123.9	106.2	101.2
67.5°	147.3	130.5	105.8	90.1	84.4
70°	128.0	110.7	87.2	73.7	69.5
72.5°	107.4	92.2	70.4	59.3	55.6
75°	89.3	74.1	54.7	45.3	42.8
77.5°	70.4	57.2	40.7	34.2	33.3
80°	52.3	40.3	28.0	26.7	26.3
82.5°	36.6	25.9	20.2	19.3	18.9
85°	22.2	14.0	12.8	11.9	11.9
87.5°	9.5	6.2	5.8	5.3	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)