

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: P243051

Luminaire Tested: **S121RDR-H305D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-62)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-H305D835-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 918.7 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.92 / 1.09
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

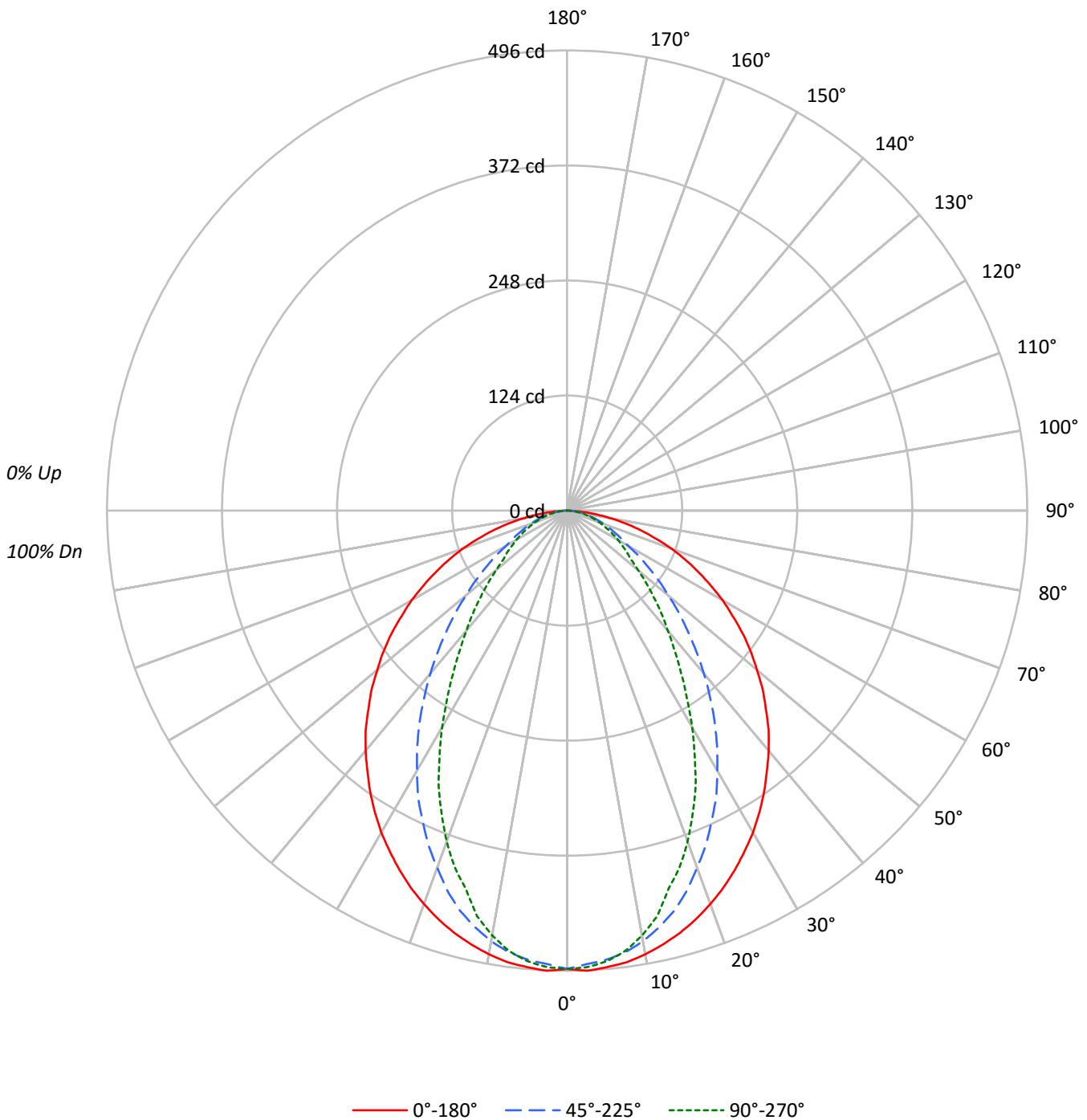
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89					87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67					65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59					57				
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52					50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42					41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39					37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35					34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14637	14637	14637
5°	14693	14455	14506
10°	14610	14183	13993
15°	14448	13690	12945
20°	14230	12909	11972
25°	13973	12057	10717
30°	13706	11071	9224
35°	13387	10009	7751
40°	13066	8873	6525
45°	12701	7702	5527
50°	12312	6559	4591
55°	11938	5538	4086
60°	11484	4492	3745
65°	10916	4024	3435
70°	10335	3630	3153
75°	9445	3263	2873
80°	8071	2850	2577
85°	6255	2414	2142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	5.0
10°-20°	125.7	13.7
20°-30°	171.5	18.7
30°-40°	177.8	19.4
40°-50°	155.1	16.9
50°-60°	116.8	12.7
60°-70°	76.6	8.3
70°-80°	39.0	4.2
80°-90°	9.9	1.1
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°	343.5	37.4
0°-40°	521.3	56.7
0°-60°	793.2	86.3
0°-90°	918.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	918.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	494	492	486	489	488	47
15°	471	464	446	434	422	133
25°	427	410	369	338	328	197
35°	370	338	277	230	214	231
45°	303	259	184	143	132	234
55°	231	176	107	81	79	206
65°	156	97	57	51	49	154
75°	82	38	28	26	25	87
85°	18	8	7	6	6	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	494.0	494.0	494.0	494.0	494.0
2.5°	496.5	494.4	489.4	493.6	492.7
5°	494.0	491.5	486.0	489.0	487.7
7.5°	491.1	487.7	480.2	481.4	478.9
10°	485.6	481.4	471.4	468.9	465.1
12.5°	478.9	474.3	459.7	453.8	447.9
15°	471.0	464.3	446.3	433.7	422.0
17.5°	461.8	453.4	429.5	411.9	403.1
20°	451.3	440.4	409.4	388.9	379.7
22.5°	440.0	426.2	390.6	364.6	353.7
25°	427.4	409.8	368.8	337.8	327.8
27.5°	414.0	393.9	347.9	312.3	297.6
30°	400.6	375.5	323.6	283.8	269.6
32.5°	385.6	357.1	300.6	256.6	240.7
35°	370.1	338.3	276.7	230.2	214.3
37.5°	353.7	319.4	252.9	206.0	190.5
40°	337.8	298.9	229.4	182.5	168.7
42.5°	321.5	278.4	206.0	162.0	150.3
45°	303.1	259.1	183.8	142.8	131.9
47.5°	285.9	238.2	163.7	125.6	115.5
50°	267.1	217.7	142.3	109.7	99.6
52.5°	249.5	196.8	124.8	92.9	86.7
55°	231.1	175.8	107.2	81.2	79.1
57.5°	211.4	155.3	91.7	72.8	70.3
60°	193.8	135.6	75.8	65.3	63.2
62.5°	174.2	116.0	65.7	58.2	56.1
65°	155.7	97.1	57.4	50.7	49.0
67.5°	137.3	80.0	49.4	44.0	42.3
70°	119.3	63.6	41.9	37.7	36.4
72.5°	99.6	48.1	35.2	31.8	31.0
75°	82.5	37.7	28.5	26.0	25.1
77.5°	64.5	28.5	22.2	20.5	20.1
80°	47.3	20.5	16.7	15.5	15.1
82.5°	32.2	13.8	11.7	10.9	10.5
85°	18.4	7.5	7.1	6.3	6.3
87.5°	7.1	2.9	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)