

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: P242184

Luminaire Tested: **S121RDR-S880D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-23)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-S880D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2259.3 lumens
Efficiency: N/A
Efficacy: 64.9 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

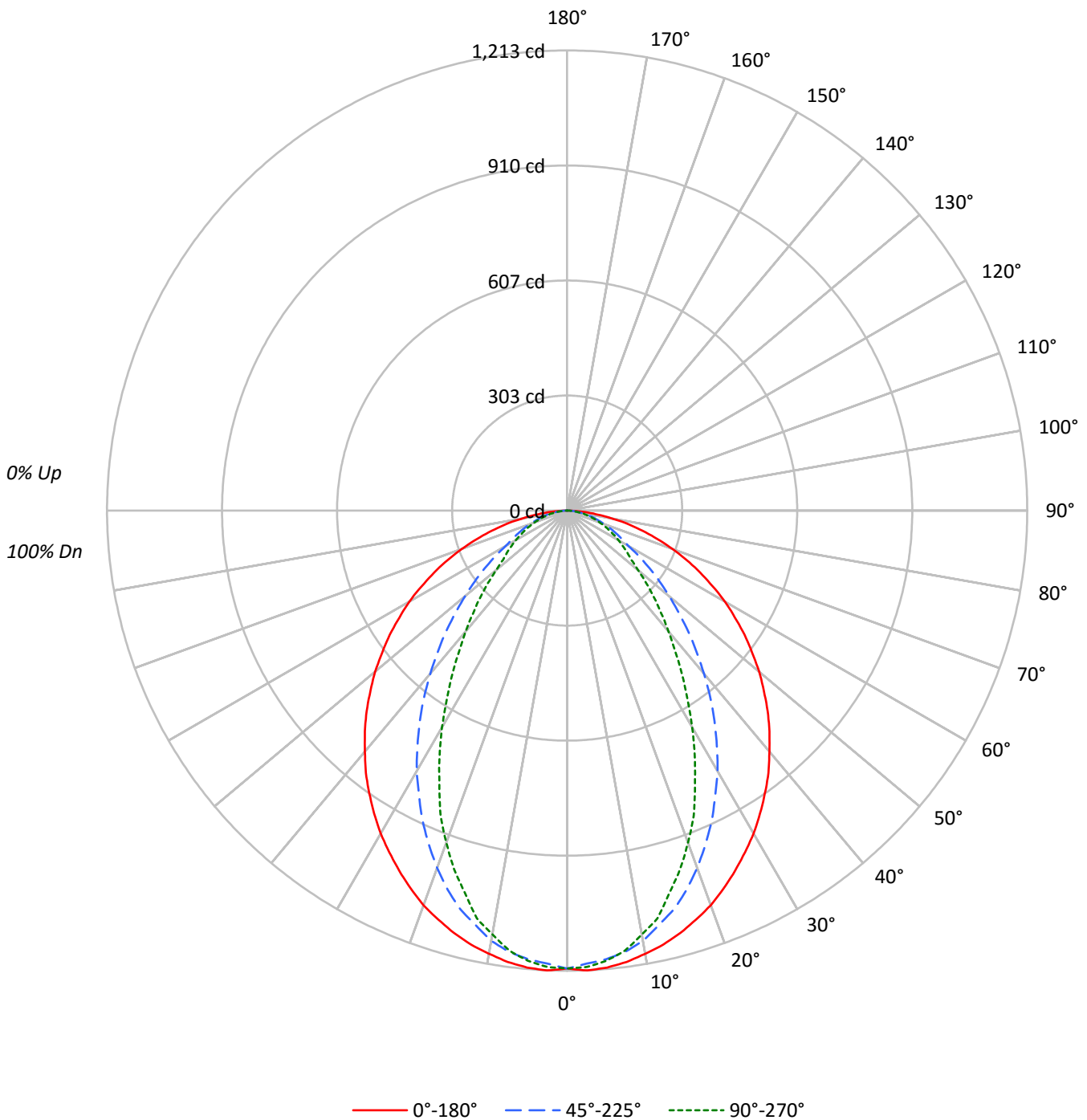
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77					75				
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67					65				
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59					57				
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52					50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42					40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38					37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35					33				
10	58	45	38	33	56	45	37	33	44	37	33	43	37	32	42	36	32					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35769	35769	35769
5°	35965	35305	35427
10°	35683	34651	34133
15°	35359	33374	31982
20°	34911	31597	29368
25°	34249	29492	26059
30°	33632	27131	22571
35°	32887	24484	19109
40°	32080	21687	16098
45°	31326	18923	13589
50°	30455	16207	11224
55°	29486	13674	10022
60°	28498	11076	9280
65°	27125	9984	8567
70°	25556	9018	7875
75°	23480	8208	7281
80°	20510	7235	6552
85°	16828	6187	5507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.0	5.0
10°-20°	307.3	13.6
20°-30°	419.6	18.6
30°-40°	436.1	19.3
40°-50°	381.0	16.9
50°-60°	288.0	12.7
60°-70°	190.2	8.4
70°-80°	98.1	4.3
80°-90°	26.0	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°	839.9	37.2
0°-40°	1276.0	56.5
0°-60°	1945.0	86.1
0°-90°	2259.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1209	1202	1187	1196	1191	115
15°	1153	1136	1088	1060	1043	325
25°	1048	1006	902	827	797	483
35°	909	828	677	566	528	569
45°	748	635	452	350	324	576
55°	571	433	265	201	194	510
65°	387	241	142	125	122	383
75°	205	95	72	66	64	218
85°	50	20	18	17	16	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.2	1207.2	1207.2	1207.2	1207.2
2.5°	1213.3	1207.2	1195.1	1206.2	1204.2
5°	1209.2	1202.2	1187.0	1196.1	1191.1
7.5°	1200.1	1192.1	1172.9	1175.9	1169.8
10°	1186.0	1176.9	1151.7	1146.6	1134.5
12.5°	1171.9	1157.7	1118.3	1108.2	1101.1
15°	1152.7	1135.5	1088.0	1059.7	1042.6
17.5°	1130.4	1107.2	1047.6	1009.2	991.0
20°	1107.2	1076.9	1002.1	949.6	931.4
22.5°	1077.9	1042.6	952.6	890.0	871.8
25°	1047.6	1006.2	902.1	827.4	797.1
27.5°	1015.3	964.8	845.6	761.7	728.4
30°	983.0	921.3	793.0	692.0	659.7
32.5°	946.6	877.9	734.4	628.4	590.0
35°	909.2	828.4	676.9	565.7	528.3
37.5°	871.8	782.9	619.3	507.1	467.7
40°	829.4	735.4	560.7	445.5	416.2
42.5°	789.0	685.9	505.1	398.0	366.7
45°	747.6	635.4	451.6	350.5	324.3
47.5°	703.1	585.9	399.0	309.1	282.9
50°	660.7	533.4	351.6	268.7	243.5
52.5°	614.2	483.9	307.1	227.3	213.2
55°	570.8	433.4	264.7	201.0	194.0
57.5°	524.3	384.9	225.3	181.8	173.8
60°	480.9	336.4	186.9	161.6	156.6
62.5°	432.4	289.9	162.6	143.5	138.4
65°	386.9	241.4	142.4	125.3	122.2
67.5°	341.5	200.0	123.2	109.1	106.1
70°	295.0	158.6	104.1	94.0	90.9
72.5°	249.5	121.2	86.9	78.8	76.8
75°	205.1	95.0	71.7	65.7	63.6
77.5°	165.7	72.7	56.6	51.5	50.5
80°	120.2	53.5	42.4	39.4	38.4
82.5°	81.8	36.4	30.3	28.3	26.3
85°	49.5	20.2	18.2	17.2	16.2
87.5°	20.2	9.1	8.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)