

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242899

Luminaire Tested: S125RDRP-S610D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242899
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

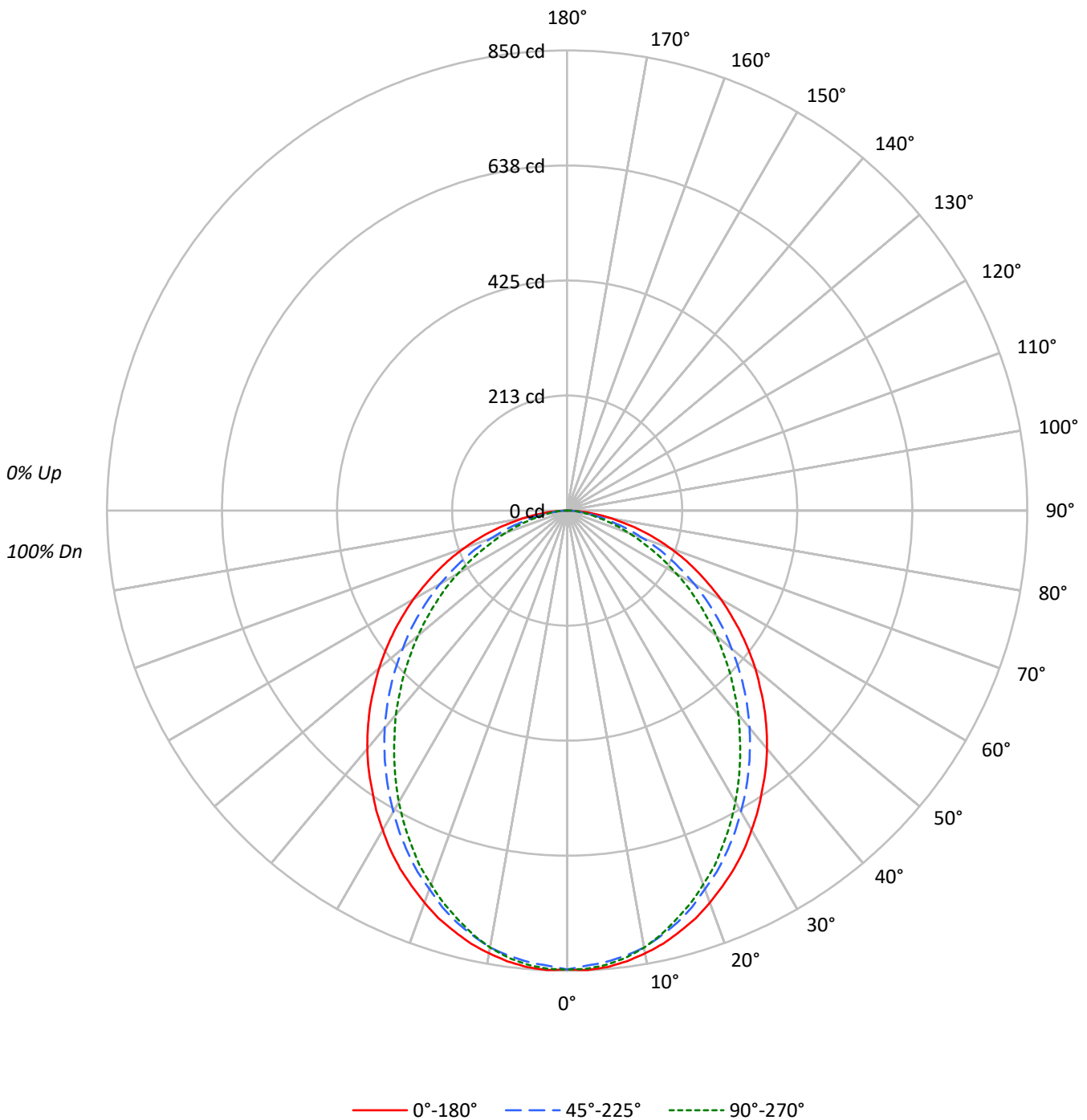
Lumens per Lamp: N/A
Luminaire Lumens: 2002.9 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 18.8
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: 24 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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87				85	
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74				72	
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64				61	
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55				53	
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48				46	
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43				41	
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38				36	
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34				33	
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31				29	
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29				27	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6025	6025	6025
5°	6039	5970	6007
10°	5993	5914	5914
15°	5922	5794	5747
20°	5831	5627	5559
25°	5724	5463	5342
30°	5591	5270	5102
35°	5455	5072	4833
40°	5328	4865	4568
45°	5174	4634	4280
50°	5020	4382	3978
55°	4840	4141	3658
60°	4660	3849	3313
65°	4447	3510	2918
70°	4204	3086	2514
75°	3869	2603	2093
80°	3405	2042	1756
85°	2870	1672	1566

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5174 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	4.0
10°-20°	223.0	11.1
20°-30°	323.3	16.1
30°-40°	368.3	18.4
40°-50°	359.0	17.9
50°-60°	302.1	15.1
60°-70°	211.7	10.6
70°-80°	108.6	5.4
80°-90°	27.1	1.4
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°	626.1	31.3
0°-40°	994.4	49.6
0°-60°	1655.5	82.7
0°-90°	2002.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2002.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	846	844	837	843	842	80
15°	805	801	788	787	781	227
25°	730	720	697	688	681	336
35°	629	613	585	566	557	394
45°	515	496	461	435	426	397
55°	391	370	334	305	295	349
65°	264	243	209	183	174	262
75°	141	122	95	81	76	149
85°	35	24	20	20	19	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.7	847.7	847.7	847.7	847.7
2.5°	849.6	847.7	841.3	847.7	847.1
5°	846.4	843.9	836.8	843.2	842.0
7.5°	840.0	837.5	829.2	834.3	833.0
10°	830.4	828.5	819.5	821.5	819.5
12.5°	819.5	817.0	804.2	805.5	802.3
15°	804.8	801.0	787.5	786.9	781.1
17.5°	789.5	783.7	767.7	764.5	760.0
20°	770.9	764.5	744.0	740.8	735.0
22.5°	750.4	744.0	722.2	715.2	710.7
25°	729.9	720.3	696.6	688.3	681.2
27.5°	706.9	695.3	670.4	659.5	652.4
30°	681.2	669.1	642.2	627.5	621.7
32.5°	656.3	641.6	614.0	597.4	589.7
35°	628.7	613.4	584.6	566.0	557.0
37.5°	602.5	583.9	554.5	532.7	523.7
40°	574.3	555.1	524.4	500.1	492.4
42.5°	544.9	525.0	493.0	470.0	457.8
45°	514.8	496.2	461.0	435.4	425.8
47.5°	483.4	464.2	429.0	402.7	391.8
50°	454.0	432.8	396.3	369.4	359.8
52.5°	421.9	400.2	366.2	336.8	327.2
55°	390.6	370.1	334.2	305.4	295.2
57.5°	358.6	336.8	302.2	274.0	265.1
60°	327.8	305.4	270.8	242.7	233.1
62.5°	295.2	274.0	238.8	213.2	203.6
65°	264.4	242.7	208.7	183.1	173.5
67.5°	233.7	211.9	179.3	154.9	147.3
70°	202.3	180.6	148.5	128.7	121.0
72.5°	171.6	150.5	121.0	103.1	98.6
75°	140.9	121.7	94.8	80.7	76.2
77.5°	109.5	94.1	71.7	60.8	57.0
80°	83.2	67.9	49.9	44.2	42.9
82.5°	57.6	44.2	33.3	31.4	30.7
85°	35.2	23.7	20.5	19.8	19.2
87.5°	14.7	10.2	9.6	9.6	9.0
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.58	19.15	17.94	19.47	19.78	16.01	17.59	16.38	17.90	18.21
	3H	19.36	20.78	19.74	21.11	21.47	17.32	18.74	17.70	19.07	19.43
	4H	20.03	21.36	20.43	21.71	22.08	17.74	19.07	18.13	19.42	19.79
	6H	20.50	21.73	20.91	22.09	22.49	17.99	19.22	18.40	19.59	19.98
	8H	20.64	21.82	21.07	22.21	22.61	18.07	19.25	18.50	19.64	20.04
	12H	20.74	21.87	21.17	22.25	22.68	18.13	19.25	18.56	19.63	20.06
4H	2H	17.97	19.30	18.37	19.65	20.03	16.70	18.03	17.10	18.38	18.76
	3H	19.95	21.06	20.36	21.46	21.86	18.20	19.31	18.61	19.71	20.11
	4H	20.74	21.74	21.17	22.15	22.59	18.69	19.70	19.13	20.11	20.55
	6H	21.33	22.20	21.79	22.65	23.10	19.04	19.91	19.49	20.35	20.81
	8H	21.52	22.34	21.99	22.78	23.25	19.15	19.96	19.61	20.41	20.87
	12H	21.66	22.39	22.14	22.87	23.34	19.23	19.96	19.72	20.44	20.91
8H	4H	20.86	21.68	21.32	22.12	22.59	19.01	19.82	19.47	20.27	20.73
	6H	21.54	22.21	22.03	22.70	23.18	19.43	20.11	19.93	20.60	21.07
	8H	21.79	22.39	22.30	22.90	23.39	19.59	20.20	20.10	20.71	21.19
	12H	21.98	22.52	22.49	23.01	23.57	19.73	20.27	20.24	20.76	21.32
12H	4H	20.86	21.59	21.34	22.06	22.53	19.05	19.78	19.53	20.25	20.72
	6H	21.53	22.14	22.04	22.65	23.13	19.48	20.09	20.00	20.60	21.09
	8H	21.82	22.35	22.33	22.85	23.41	19.69	20.23	20.20	20.72	21.28