

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: P242790

Luminaire Tested: S125DRP-S375D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242790
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S375D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

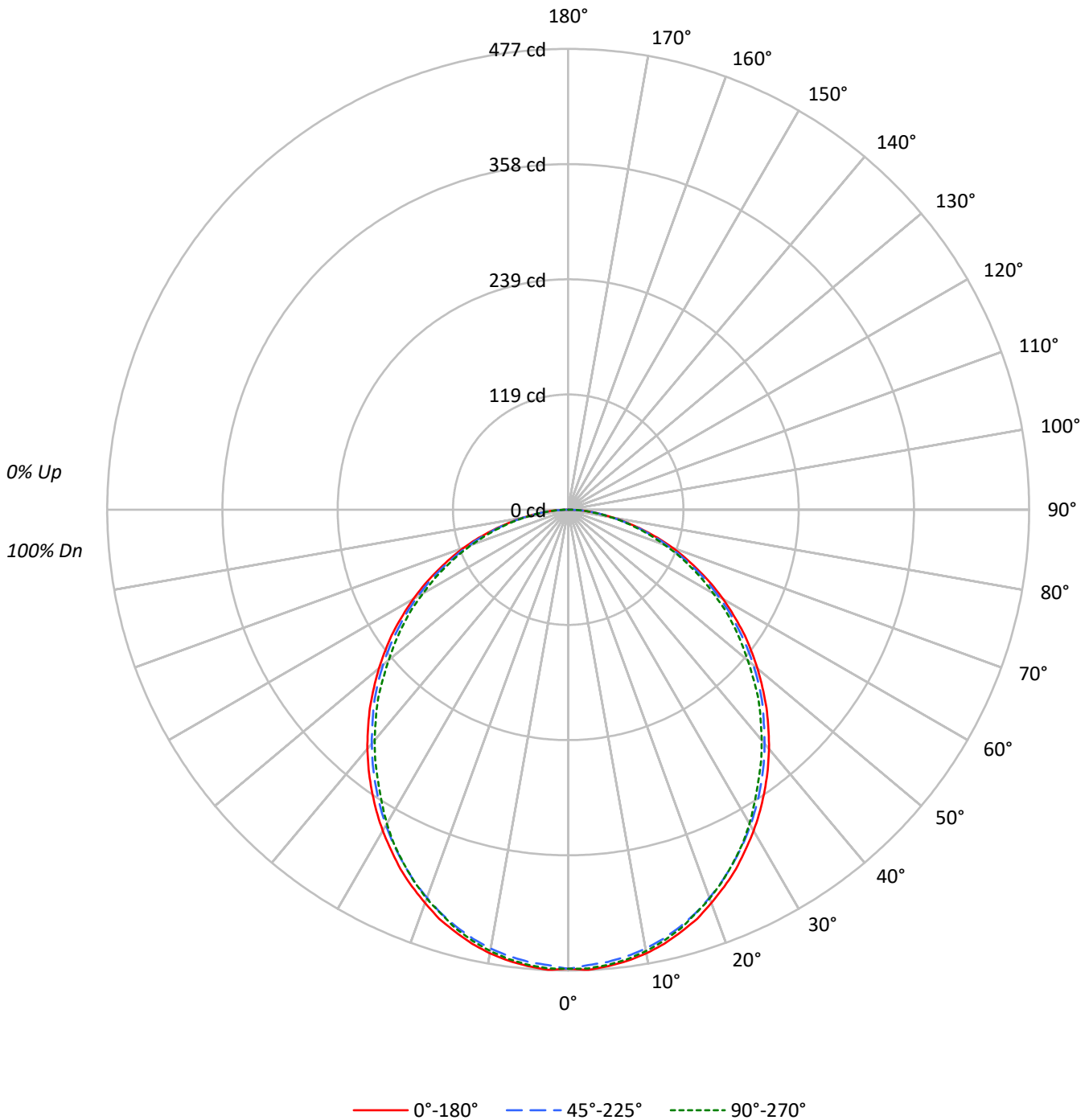
Lumens per Lamp: N/A
Luminaire Lumens: 1236.8 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 11.6
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: 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	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																																				
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84																																				
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70																																				
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59																																				
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																																				
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																																				
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																																				
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																																				
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																																				
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																																				
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3377	3377	3377
5°	3385	3352	3374
10°	3365	3329	3348
15°	3327	3289	3303
20°	3276	3233	3239
25°	3219	3167	3163
30°	3150	3095	3079
35°	3076	3017	2975
40°	3000	2934	2891
45°	2917	2857	2800
50°	2826	2764	2681
55°	2738	2660	2585
60°	2634	2554	2463
65°	2509	2428	2346
70°	2390	2282	2203
75°	2178	2106	2035
80°	1940	1907	1862
85°	1688	1721	1623

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2917 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	3.6
10°-20°	126.7	10.2
20°-30°	187.0	15.1
30°-40°	218.2	17.6
40°-50°	219.1	17.7
50°-60°	192.3	15.6
60°-70°	143.3	11.6
70°-80°	81.8	6.6
80°-90°	23.6	1.9
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°	358.5	29.0
0°-40°	576.6	46.6
0°-60°	988.1	79.9
0°-90°	1236.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1236.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	474	474	470	473	473	45
15°	452	451	447	449	449	128
25°	410	409	404	404	403	189
35°	354	353	348	346	343	222
45°	290	289	284	280	279	224
55°	221	220	215	211	209	197
65°	149	148	144	141	140	148
75°	79	79	77	76	74	84
85°	21	21	21	21	20	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	475.2	475.2	475.2	475.2	475.2
2.5°	476.7	475.6	471.8	475.6	475.2
5°	474.4	473.7	469.9	473.3	472.9
7.5°	471.0	470.3	466.2	469.5	469.2
10°	466.2	465.4	461.3	464.3	463.9
12.5°	460.1	458.6	454.9	457.1	457.1
15°	452.2	451.1	447.0	448.9	448.9
17.5°	444.0	442.1	438.0	440.2	438.3
20°	433.1	432.3	427.4	430.1	428.2
22.5°	422.2	420.7	416.2	417.7	416.5
25°	410.5	408.6	403.8	404.5	403.4
27.5°	397.0	395.9	391.0	391.3	390.2
30°	383.8	382.7	377.1	376.3	375.2
32.5°	369.5	367.7	362.8	361.3	359.0
35°	354.5	353.0	347.7	345.9	342.9
37.5°	339.1	337.2	332.3	329.7	327.8
40°	323.3	321.4	316.2	312.8	311.6
42.5°	306.4	304.9	299.6	296.6	294.7
45°	290.2	288.7	284.2	279.7	278.6
47.5°	272.6	272.9	267.3	262.8	260.1
50°	255.6	254.5	250.0	245.1	242.5
52.5°	238.3	237.6	232.7	228.6	225.6
55°	221.0	219.9	214.7	211.3	208.6
57.5°	202.6	202.3	197.7	193.2	192.1
60°	185.3	183.8	179.7	175.9	173.3
62.5°	167.3	166.2	162.8	158.6	156.8
65°	149.2	148.5	144.4	141.0	139.5
67.5°	131.6	130.1	127.1	124.1	123.3
70°	115.0	113.2	109.8	107.5	106.0
72.5°	97.0	95.9	94.0	91.4	89.8
75°	79.3	78.6	76.7	75.6	74.1
77.5°	62.8	62.4	61.3	60.5	59.4
80°	47.4	47.4	46.6	46.2	45.5
82.5°	33.8	33.1	33.1	32.3	32.3
85°	20.7	21.1	21.1	20.7	19.9
87.5°	10.2	10.2	9.8	9.8	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	15.58	17.20	15.94	17.51	17.83	15.25	16.87	15.61	17.18	17.50
	3H	17.35	18.81	17.73	19.14	19.50	16.98	18.44	17.36	18.77	19.13
	4H	18.01	19.38	18.40	19.73	20.11	17.63	19.01	18.03	19.35	19.73
	6H	18.48	19.76	18.89	20.12	20.51	18.11	19.39	18.53	19.76	20.15
	8H	18.64	19.86	19.06	20.25	20.65	18.28	19.49	18.70	19.88	20.28
	12H	18.74	19.91	19.17	20.29	20.72	18.39	19.55	18.81	19.94	20.36
4H	2H	16.16	17.53	16.56	17.88	18.26	15.90	17.27	16.29	17.62	18.00
	3H	18.15	19.31	18.56	19.70	20.10	17.85	19.00	18.26	19.40	19.80
	4H	18.94	19.98	19.37	20.40	20.83	18.62	19.67	19.05	20.08	20.52
	6H	19.55	20.46	20.00	20.90	21.36	19.24	20.15	19.69	20.59	21.05
	8H	19.75	20.61	20.21	21.05	21.51	19.45	20.30	19.91	20.74	21.21
	12H	19.91	20.67	20.39	21.15	21.62	19.60	20.37	20.08	20.85	21.31
8H	4H	19.23	20.08	19.69	20.52	20.99	18.95	19.80	19.41	20.24	20.71
	6H	19.96	20.67	20.45	21.15	21.63	19.69	20.40	20.18	20.88	21.36
	8H	20.23	20.87	20.74	21.38	21.86	19.97	20.61	20.48	21.11	21.60
	12H	20.46	21.03	20.97	21.52	22.08	20.20	20.77	20.71	21.26	21.82
12H	4H	19.26	20.02	19.74	20.50	20.97	18.98	19.75	19.46	20.23	20.70
	6H	20.01	20.65	20.52	21.15	21.64	19.75	20.39	20.26	20.89	21.38
	8H	20.34	20.91	20.85	21.40	21.96	20.09	20.65	20.60	21.14	21.71