

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: STREETWORKS

Report Number: P398134

Luminaire Tested: **ARCH-S-PA1-90-740-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398134
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-740-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8367 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

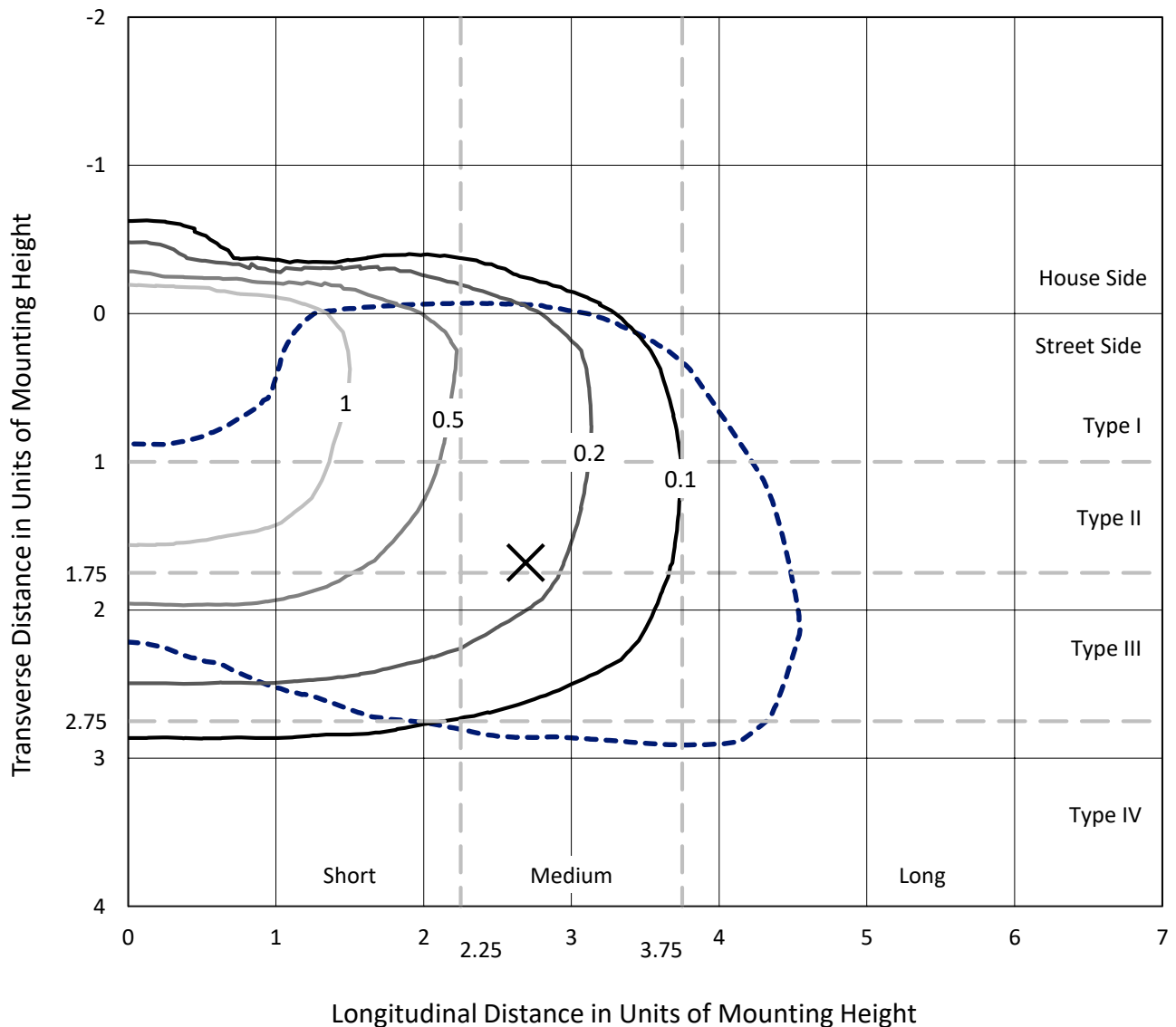
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

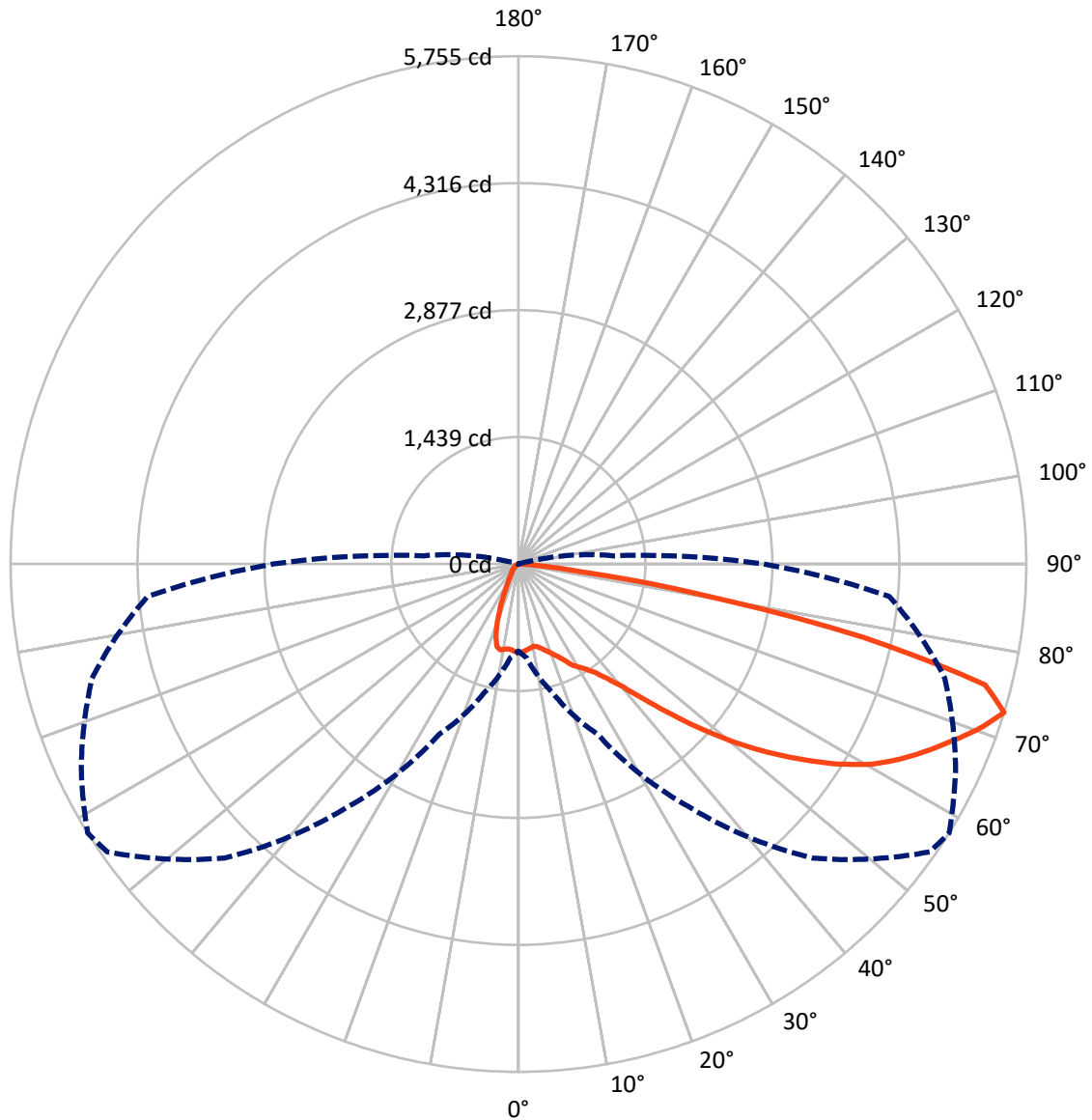


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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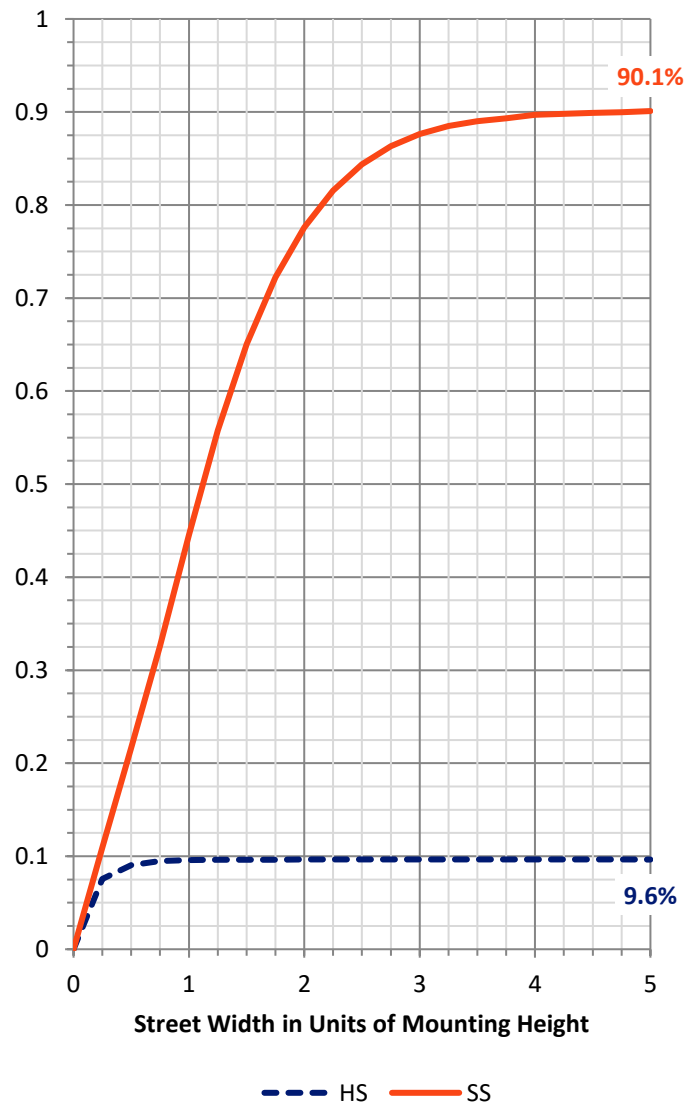
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	813.6	0.0	813.6
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	7553.4	0.0	7553.4
	% Fixture	90.3	0.0	90.3
Total	Lumens	8367.0	0.0	8367.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.1	1.1
10°-20°	240.0	2.9
20°-30°	377.0	4.5
30°-40°	650.2	7.8
40°-50°	1237.0	14.8
50°-60°	1959.0	23.4
60°-70°	2286.0	27.3
70°-80°	1431.7	17.1
80°-90°	94.0	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°-90°	8367.0	100.0
0°-180°	8367.0	100.0



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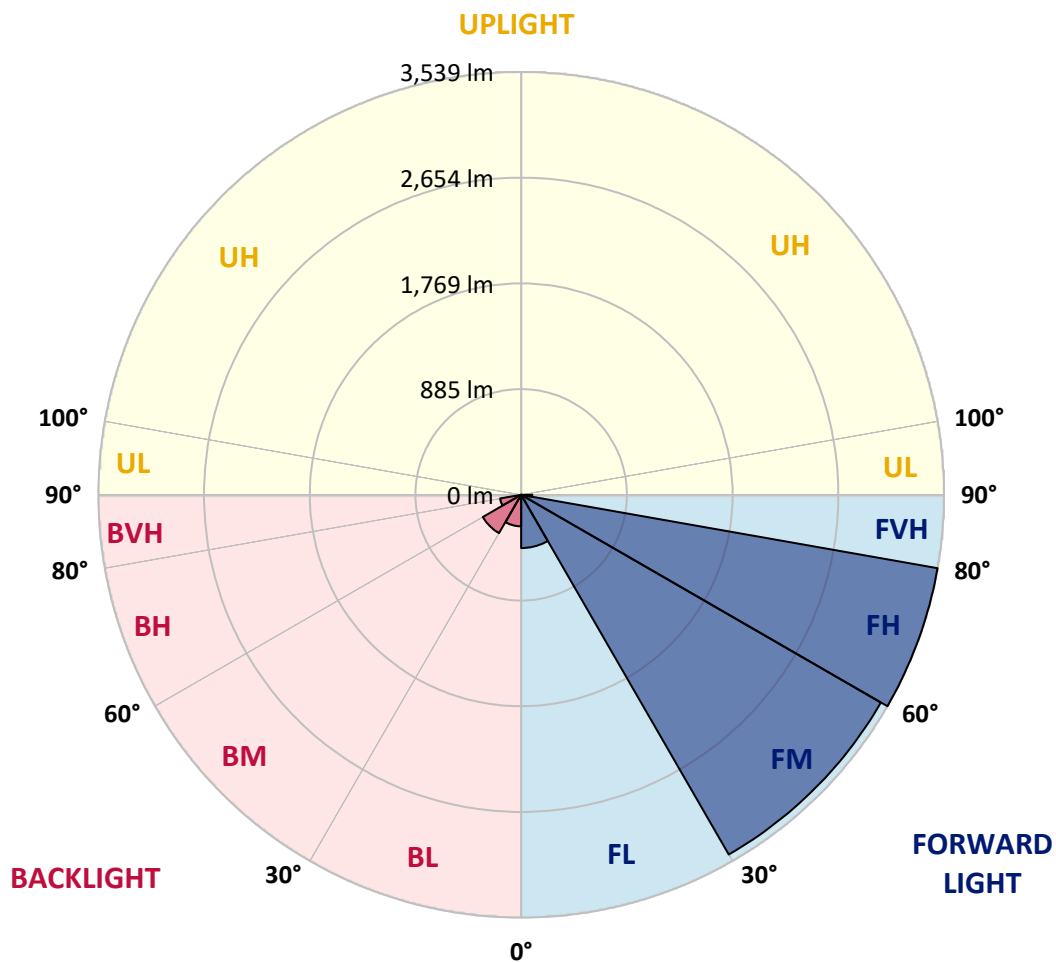
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	445.7	5.3			
FM	(30°-60°)	3476.0	41.5			
FH	(60°-80°)	3538.6	42.3			G2/5000
FVH	(80°-90°)	93.1	1.1			G1/100
BL	(0°-30°)	263.5	3.1	B1/500		
BM	(30°-60°)	370.2	4.4	B1/1000		
BH	(60°-80°)	179.0	2.1	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0
2.5°	999.5	995.0	993.5	992.0	993.5	995.0	990.5	995.0	992.0	993.5	996.5
5°	963.6	959.1	957.6	959.1	963.6	971.1	974.1	978.6	978.6	983.0	984.5
7.5°	923.2	920.2	918.7	921.7	930.7	947.1	956.1	962.1	968.1	977.1	986.0
10°	900.7	899.3	897.8	902.2	911.2	926.2	938.2	947.1	969.6	995.0	1011.5
12.5°	885.8	885.8	888.8	897.8	909.7	921.7	950.1	962.1	996.5	1035.4	1057.9
15°	873.8	873.8	878.3	894.8	911.2	939.6	981.5	995.0	1035.4	1083.3	1113.2
17.5°	864.8	867.8	870.8	887.3	918.7	966.6	1016.0	1035.4	1084.8	1137.2	1170.1
20°	866.3	869.3	870.8	887.3	932.2	998.0	1060.8	1083.3	1140.1	1195.5	1228.4
22.5°	875.3	879.8	881.3	903.7	956.1	1030.9	1111.7	1137.2	1198.5	1256.9	1282.3
25°	912.7	915.7	906.7	926.2	990.5	1081.8	1177.6	1204.5	1265.8	1319.7	1340.6
27.5°	1039.9	1042.9	993.5	971.1	1017.5	1123.7	1258.4	1295.8	1372.1	1408.0	1411.0
30°	1315.2	1318.2	1220.9	1114.7	1081.8	1159.6	1303.2	1355.6	1454.4	1494.8	1476.8
32.5°	1669.8	1666.8	1533.7	1376.6	1234.4	1222.4	1367.6	1422.9	1530.7	1569.6	1556.1
35°	2025.9	2030.4	1916.7	1680.3	1476.8	1340.6	1449.9	1514.2	1644.4	1699.7	1675.8
37.5°	2269.8	2299.7	2250.4	1994.5	1774.6	1559.1	1583.0	1651.9	1815.0	1889.8	1838.9
40°	2614.0	2606.5	2486.8	2298.3	2103.7	1882.3	1798.5	1831.4	2018.5	2118.7	2039.4
42.5°	3076.3	3061.3	2857.9	2673.8	2456.9	2275.8	2105.2	2099.2	2251.9	2368.6	2253.4
45°	3495.3	3472.8	3333.7	3155.6	2917.7	2709.7	2479.3	2426.9	2533.2	2631.9	2497.3
47.5°	3828.9	3791.5	3692.8	3598.5	3540.1	3217.0	2871.3	2792.0	2845.9	2919.2	2729.2
50°	4223.9	4120.7	3977.1	3920.2	4041.4	3791.5	3248.4	3172.1	3169.1	3211.0	2968.6
52.5°	4403.5	4216.5	4135.7	4183.5	4397.5	4325.7	3655.4	3546.1	3502.7	3507.2	3191.5
55°	4186.5	4165.6	4209.0	4358.6	4638.4	4596.5	4045.9	3911.2	3846.9	3766.1	3405.5
57.5°	3939.6	4004.0	4176.1	4461.8	4943.6	4879.3	4430.4	4277.8	4159.6	3974.1	3643.4
60°	3712.2	3778.1	4062.3	4485.8	5111.2	5151.6	4750.6	4605.5	4430.4	4186.5	3905.2
62.5°	3366.6	3417.5	3817.0	4451.4	5037.9	5310.2	4973.6	4864.3	4701.2	4388.5	4206.0
65°	2977.6	3010.5	3405.5	4176.1	4894.3	5292.3	5157.6	5096.3	4937.7	4599.5	4503.7
67.5°	2551.1	2590.0	2919.2	3680.8	4613.0	5208.5	5331.2	5325.2	5144.1	4832.9	4719.2
70°	2060.3	2063.3	2335.7	3052.4	4122.2	5040.9	5546.6	5560.1	5341.6	5008.0	4728.2
72.5°	986.0	1066.8	1514.2	2130.7	3350.1	4711.7	5687.3	5754.6	5465.8	5002.0	4218.0
75°	225.9	233.4	441.4	1013.0	1964.6	3616.5	5335.7	5461.3	5163.6	4325.7	2971.6
77.5°	82.3	86.8	124.2	296.3	755.6	1868.8	3818.4	4002.5	3817.0	2796.5	1405.0
80°	55.4	53.9	64.3	131.7	347.1	529.7	1952.6	2061.8	1882.3	954.6	336.7
82.5°	28.4	29.9	44.9	73.3	233.4	184.0	652.4	709.2	583.5	191.5	62.8
85°	13.5	13.5	25.4	46.4	98.8	64.3	145.1	175.1	157.1	83.8	20.9
87.5°	13.5	13.5	23.9	29.9	50.9	26.9	35.9	44.9	41.9	44.9	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0	1004.0
2.5°	996.5	995.0	993.5	996.5	995.0	998.0	998.0	1001.0	1001.0	998.0	996.5
5°	983.0	980.0	977.1	977.1	975.6	978.6	987.5	995.0	996.5	992.0	990.5
7.5°	984.5	984.5	981.5	975.6	965.1	965.1	965.1	974.1	978.6	975.6	974.1
10°	1011.5	1013.0	1005.5	992.0	974.1	957.6	926.2	879.8	836.4	824.4	819.9
12.5°	1057.9	1059.4	1044.4	1020.4	983.0	885.8	766.1	655.4	570.1	546.1	541.6
15°	1113.2	1114.7	1087.8	1048.9	935.2	709.2	531.2	405.5	330.7	312.7	311.2
17.5°	1170.1	1167.1	1126.7	1051.9	793.0	502.7	323.2	258.9	239.4	234.9	236.4
20°	1225.4	1216.5	1161.1	996.5	610.5	329.2	236.4	221.4	217.0	214.0	214.0
22.5°	1276.3	1258.4	1189.5	887.3	427.9	236.4	211.0	208.0	202.0	197.5	196.0
25°	1327.2	1301.7	1207.5	745.1	287.3	206.5	199.0	193.0	185.5	179.6	178.1
27.5°	1388.5	1352.6	1198.5	565.6	215.5	191.5	185.5	176.6	166.1	157.1	154.1
30°	1446.9	1406.5	1147.6	390.5	184.0	176.6	167.6	154.1	140.6	130.2	127.2
32.5°	1520.2	1473.8	1056.4	255.9	160.1	154.1	145.1	128.7	110.7	98.8	95.8
35°	1624.9	1572.6	939.6	179.6	140.6	130.2	118.2	100.2	80.8	71.8	70.3
37.5°	1771.6	1701.2	793.0	145.1	124.2	109.2	91.3	73.3	59.9	52.4	50.9
40°	1951.1	1843.4	629.9	128.7	110.7	91.3	68.8	52.4	43.4	37.4	37.4
42.5°	2145.6	1976.6	463.8	118.2	97.3	74.8	50.9	37.4	31.4	28.4	26.9
45°	2346.1	2094.8	312.7	109.2	85.3	56.9	35.9	25.4	20.9	20.9	19.5
47.5°	2554.1	2174.1	202.0	98.8	71.8	41.9	23.9	18.0	15.0	15.0	15.0
50°	2760.6	2216.0	143.6	89.8	58.4	28.4	18.0	13.5	12.0	12.0	12.0
52.5°	2910.2	2189.0	115.2	77.8	44.9	20.9	13.5	10.5	9.0	9.0	9.0
55°	3040.4	2142.6	100.2	67.3	32.9	15.0	10.5	9.0	7.5	7.5	7.5
57.5°	3173.6	2082.8	89.8	56.9	23.9	10.5	7.5	6.0	6.0	6.0	6.0
60°	3294.8	1981.0	77.8	44.9	16.5	7.5	6.0	4.5	4.5	4.5	4.5
62.5°	3413.0	1894.3	67.3	34.4	12.0	6.0	3.0	3.0	1.5	1.5	1.5
65°	3480.3	1777.6	53.9	22.4	7.5	4.5	1.5	1.5	0.0	0.0	0.0
67.5°	3459.3	1638.4	37.4	13.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
70°	3314.2	1451.4	22.4	7.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	2775.6	1074.3	13.5	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0
75°	1853.9	493.8	7.5	4.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	848.4	148.1	4.5	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	170.6	38.9	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.9	7.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)