

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: P399454

Luminaire Tested: **ARCH-L-PA3-140-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-140-827-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16637 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

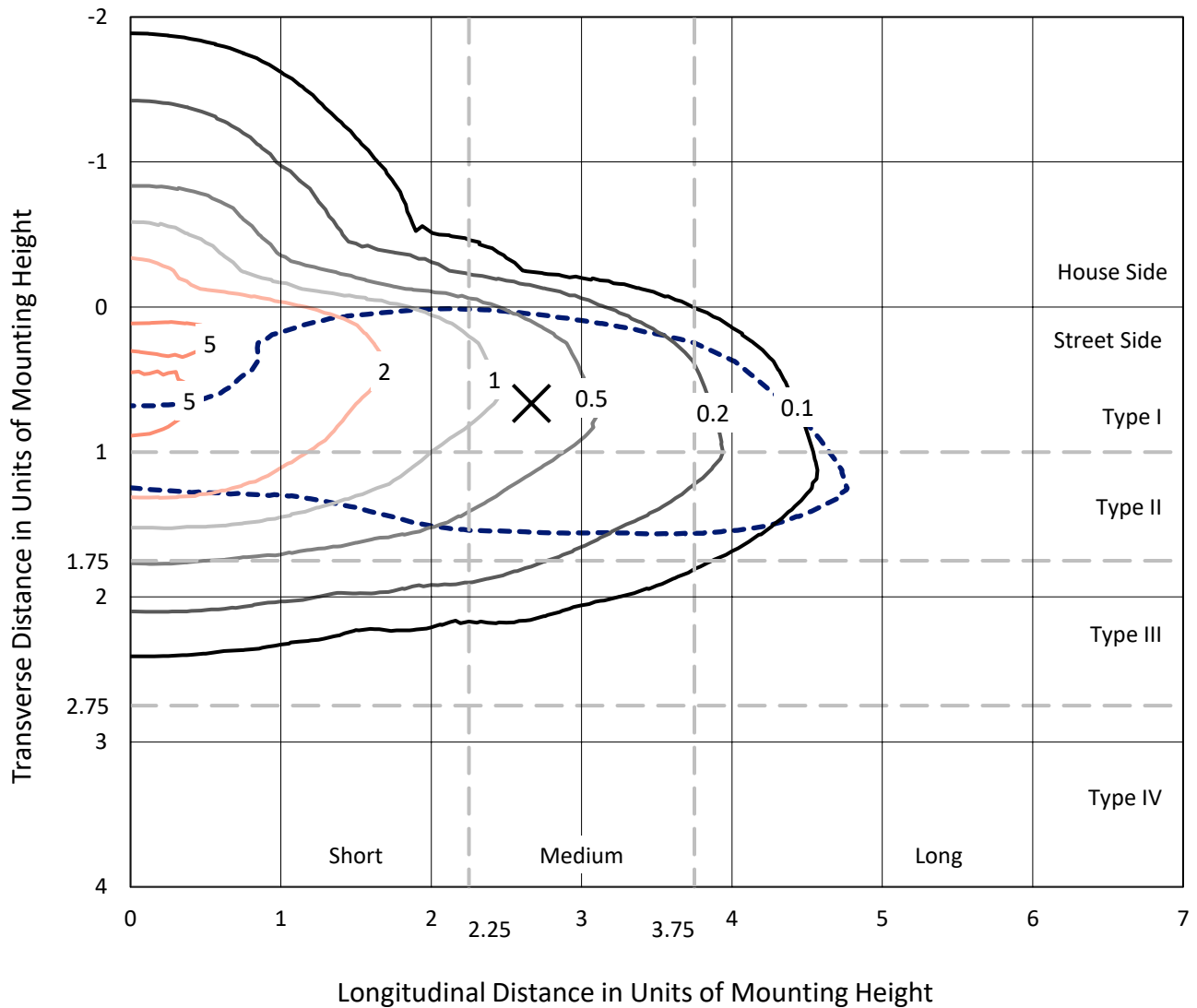
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

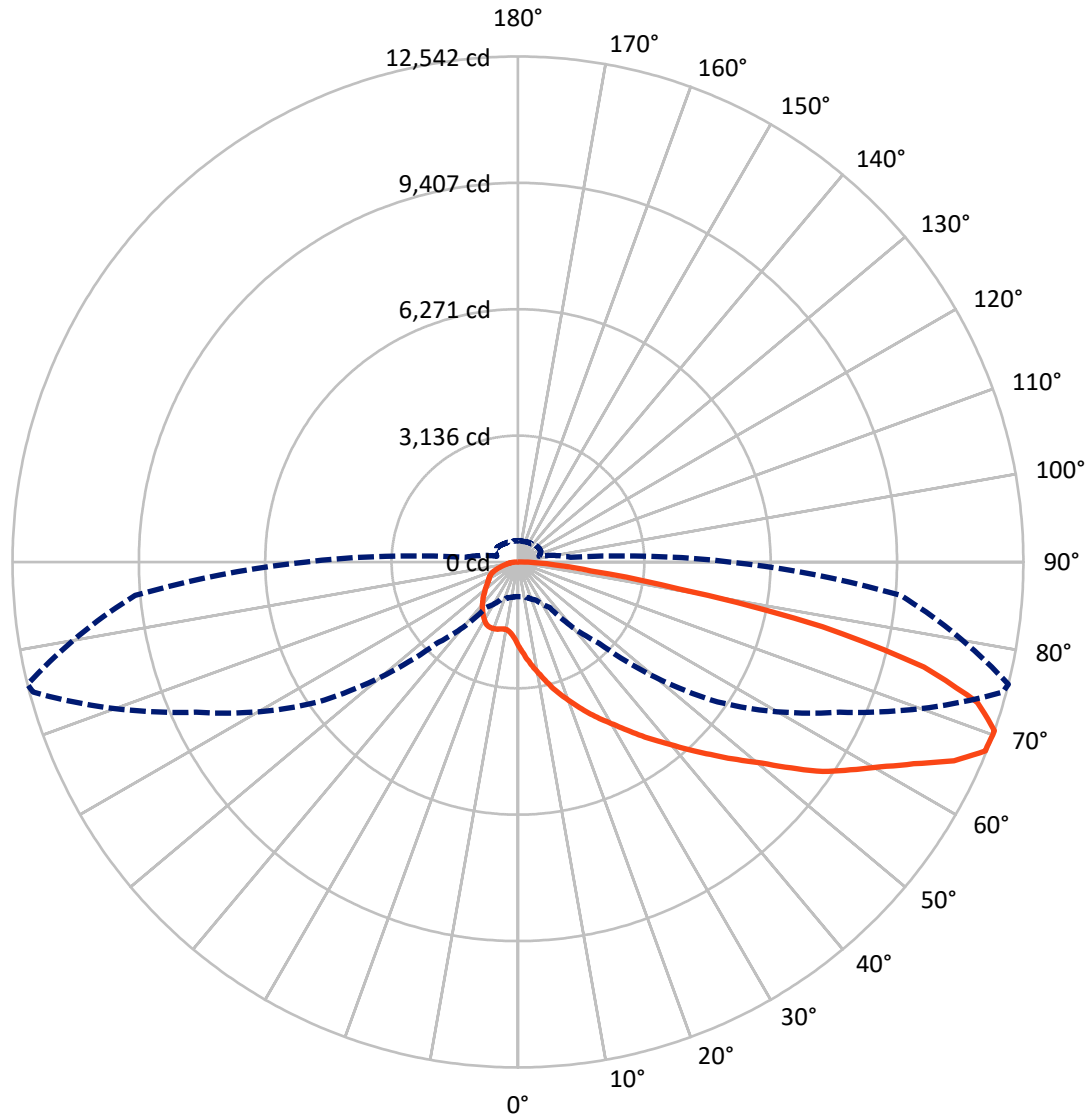
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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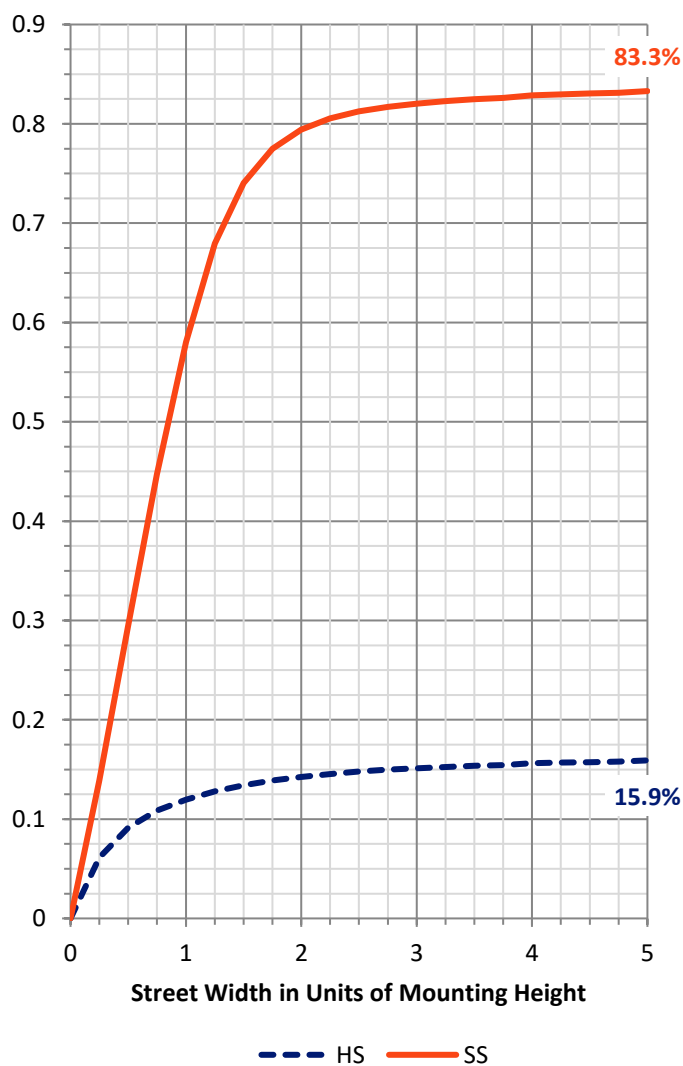
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2716.1	0.0	2716.1
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	13920.9	0.0	13920.9
	% Fixture	83.7	0.0	83.7
Total	Lumens	16637.0	0.0	16637.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.2	1.3
10°-20°	734.7	4.4
20°-30°	1314.5	7.9
30°-40°	2126.4	12.8
40°-50°	3076.1	18.5
50°-60°	3520.8	21.2
60°-70°	3238.8	19.5
70°-80°	2002.8	12.0
80°-90°	406.7	2.4
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°-90°	16637.0	100.0
0°-180°	16637.0	100.0

Coefficient of Utilization



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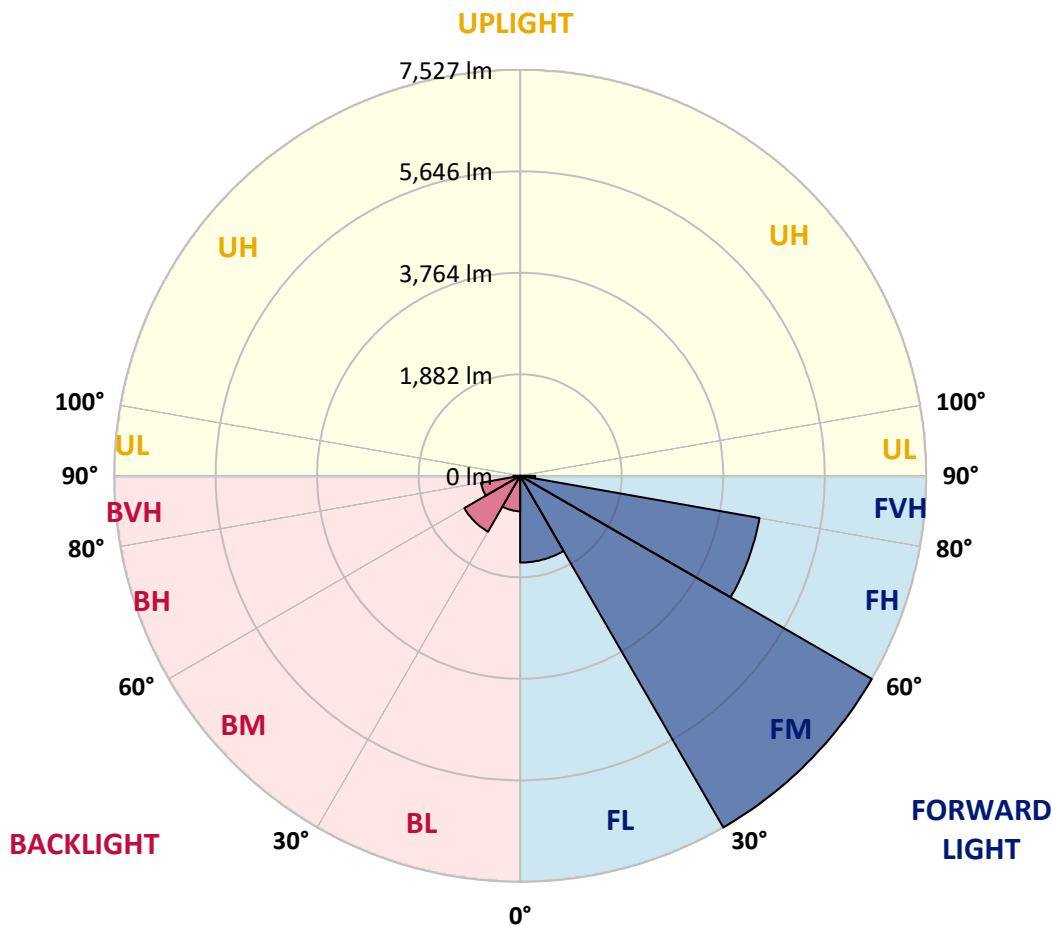
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1609.3	9.7			
FM (30°-60°)	7527.5	45.2			
FH (60°-80°)	4504.9	27.1			G2/5000
FVH (80°-90°)	279.2	1.7			G3/500
BL (0°-30°)	656.0	3.9	B2/1000		
BM (30°-60°)	1195.9	7.2	B2/2500		
BH (60°-80°)	736.7	4.4	B2/1000		G2/1000
BVH (80°-90°)	127.5	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5
2.5°	2651.5	2631.8	2629.6	2599.0	2570.6	2494.0	2439.3	2343.1	2246.8	2244.6	2148.3
5°	3065.0	3045.3	3034.4	2997.2	2949.1	2848.4	2750.0	2601.2	2437.1	2426.2	2244.6
7.5°	3345.0	3327.5	3305.7	3290.3	3244.4	3154.7	3034.4	2857.2	2631.8	2610.0	2356.2
10°	3533.2	3522.2	3517.9	3506.9	3478.5	3406.3	3290.3	3102.2	2826.5	2802.5	2474.3
12.5°	3614.1	3609.7	3629.4	3660.1	3671.0	3642.6	3531.0	3353.8	3040.9	3014.7	2616.5
15°	3520.1	3524.4	3574.7	3679.8	3791.3	3852.6	3787.0	3614.1	3283.8	3246.6	2782.8
17.5°	3476.3	3482.9	3517.9	3618.5	3776.0	3966.3	3997.0	3861.3	3517.9	3465.4	2957.8
20°	3552.9	3561.6	3587.9	3666.6	3776.0	3979.5	4139.2	4097.6	3747.6	3692.9	3126.3
22.5°	3747.6	3758.5	3756.3	3806.6	3881.0	4021.0	4217.9	4320.8	3988.2	3927.0	3301.3
25°	4163.2	4154.5	4080.1	4056.0	4075.7	4165.4	4322.9	4535.2	4239.8	4178.6	3485.0
27.5°	4727.7	4716.7	4581.1	4458.6	4349.2	4388.6	4471.7	4708.0	4495.8	4425.8	3660.1
30°	5331.5	5318.4	5160.8	4961.8	4718.9	4662.0	4651.1	4858.9	4753.9	4679.5	3846.0
32.5°	5920.0	5909.0	5740.6	5508.7	5174.0	5003.3	4898.3	5027.4	5047.1	4974.9	4049.5
35°	6456.0	6456.0	6311.6	6035.9	5657.5	5399.3	5226.5	5235.2	5384.0	5300.9	4281.4
37.5°	6932.9	6930.7	6773.2	6501.9	6138.8	5843.4	5629.0	5486.8	5705.6	5633.4	4524.2
40°	7311.4	7296.1	7180.1	6943.8	6578.5	6285.3	6068.8	5782.2	6064.4	5998.7	4782.4
42.5°	7587.0	7578.3	7499.5	7293.9	6946.0	6670.4	6521.6	6154.1	6471.3	6405.7	5084.3
45°	7694.2	7711.7	7711.7	7517.0	7241.4	6989.8	6924.2	6563.2	6911.0	6845.4	5408.1
47.5°	7521.4	7567.3	7661.4	7674.5	7431.7	7261.1	7282.9	6974.5	7363.9	7328.9	5762.5
50°	6981.0	7066.4	7272.0	7643.9	7508.3	7468.9	7589.2	7394.5	7849.6	7838.6	6193.5
52.5°	5587.5	5795.3	6436.3	7103.5	7455.8	7565.2	7893.3	7867.1	8475.3	8492.8	6755.7
55°	4285.8	4364.5	5106.2	6241.6	7134.2	7534.5	8096.8	8328.7	9153.4	9175.3	7272.0
57.5°	3465.4	3517.9	3922.6	5106.2	6401.3	7368.3	8256.5	8597.8	9674.1	9731.0	7731.4
60°	2745.6	2822.2	3093.4	3907.3	5375.2	6967.9	8368.1	8897.5	10234.2	10319.5	8280.5
62.5°	2041.1	2078.3	2334.3	2894.4	4255.1	6248.1	8309.0	9223.5	10921.1	11024.0	8941.2
65°	1452.7	1485.5	1667.0	2058.7	3146.0	5274.6	7965.5	9466.3	11783.1	11888.1	9606.3
67.5°	1087.3	1100.4	1203.2	1439.5	2119.9	4097.6	7269.8	9424.7	12413.2	12507.2	9873.2
70°	859.8	864.2	914.5	1041.4	1378.3	2852.8	6051.3	8814.4	12459.1	12542.2	9536.3
72.5°	713.2	711.0	739.5	800.7	960.4	1804.9	4482.7	7681.1	11868.4	11925.3	8595.6
75°	588.5	592.9	612.6	647.6	732.9	1190.1	2905.3	6127.8	10470.5	10409.2	7212.9
77.5°	494.4	492.2	501.0	531.6	592.9	855.4	1702.1	4428.0	7759.9	7729.2	4734.2
80°	398.2	402.5	415.7	441.9	498.8	651.9	1006.4	2763.1	4163.2	4051.7	2262.1
82.5°	266.9	308.5	334.7	365.4	431.0	481.3	638.8	1404.5	1861.8	1833.3	1026.0
85°	126.9	168.5	249.4	284.4	350.0	301.9	433.2	669.4	932.0	921.0	369.7
87.5°	26.3	26.3	133.5	159.7	216.6	129.1	240.6	291.0	450.7	422.2	151.0
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°	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5	2080.5
2.5°	2091.5	2032.4	1914.3	1820.2	1723.9	1669.2	1601.4	1568.6	1562.0	1544.5	1557.7
5°	2128.7	2012.7	1789.6	1643.0	1544.5	1496.4	1472.3	1463.6	1461.4	1457.0	1457.0
7.5°	2179.0	2001.8	1710.8	1562.0	1498.6	1483.3	1489.8	1503.0	1505.2	1509.5	1507.3
10°	2240.2	2004.0	1667.0	1542.3	1511.7	1513.9	1535.8	1553.3	1562.0	1568.6	1566.4
12.5°	2325.6	2030.2	1660.5	1555.5	1542.3	1551.1	1573.0	1590.5	1599.2	1601.4	1601.4
15°	2437.1	2084.9	1675.8	1583.9	1573.0	1579.5	1592.7	1599.2	1601.4	1599.2	1599.2
17.5°	2559.6	2150.5	1697.7	1601.4	1583.9	1577.4	1573.0	1566.4	1553.3	1544.5	1544.5
20°	2677.8	2209.6	1708.6	1599.2	1568.6	1542.3	1516.1	1483.3	1461.4	1443.9	1443.9
22.5°	2795.9	2264.3	1708.6	1575.2	1527.0	1476.7	1422.0	1369.5	1336.7	1314.8	1314.8
25°	2920.6	2316.8	1695.5	1533.6	1461.4	1389.2	1314.8	1249.2	1216.4	1194.5	1190.1
27.5°	3025.6	2347.4	1660.5	1474.5	1380.5	1288.6	1203.2	1135.4	1111.4	1091.7	1091.7
30°	3137.2	2367.1	1594.9	1398.0	1288.6	1183.6	1096.1	1041.4	1015.1	986.7	984.5
32.5°	3261.9	2380.2	1520.5	1317.0	1194.5	1082.9	1008.5	964.8	907.9	877.3	872.9
35°	3406.3	2397.7	1441.7	1225.1	1100.4	999.8	956.0	883.8	829.1	802.9	800.7
37.5°	3559.4	2410.9	1356.4	1144.2	1015.1	945.1	901.3	816.0	767.9	728.5	724.1
40°	3721.3	2410.9	1268.9	1065.4	947.3	921.0	837.9	761.3	680.4	660.7	656.3
42.5°	3900.7	2406.5	1181.4	988.9	883.8	866.3	800.7	719.8	678.2	660.7	656.3
45°	4091.0	2391.2	1098.2	901.3	818.2	783.2	732.9	711.0	693.5	693.5	693.5
47.5°	4307.6	2378.1	1004.2	822.6	770.1	730.7	693.5	680.4	678.2	684.8	691.3
50°	4585.5	2373.7	925.4	765.7	732.9	686.9	682.6	671.6	673.8	673.8	673.8
52.5°	4922.4	2334.3	851.0	724.1	695.7	641.0	654.1	665.1	669.4	667.3	665.1
55°	5169.6	2264.3	787.6	695.7	669.4	623.5	641.0	658.5	662.9	656.3	656.3
57.5°	5392.7	2165.8	737.3	673.8	651.9	612.6	632.3	649.8	645.4	643.2	641.0
60°	5648.7	2071.8	697.9	662.9	634.4	608.2	625.7	636.6	630.1	625.7	623.5
62.5°	5926.6	1979.9	669.4	662.9	621.3	606.0	619.1	623.5	610.4	606.0	606.0
65°	6055.6	1835.5	638.8	662.9	614.8	601.6	606.0	601.6	588.5	588.5	586.3
67.5°	5843.4	1597.0	599.4	654.1	623.5	595.1	586.3	579.7	564.4	564.4	560.1
70°	5257.1	1312.6	542.6	625.7	625.7	592.9	560.1	544.7	527.2	533.8	525.1
72.5°	4491.4	1041.4	472.5	577.6	612.6	590.7	531.6	507.6	492.2	498.8	485.7
75°	3638.2	807.3	389.4	501.0	579.7	579.7	503.2	470.4	452.9	452.9	437.5
77.5°	2319.0	597.2	317.2	415.7	520.7	564.4	479.1	428.8	402.5	396.0	385.0
80°	1148.6	420.0	260.3	330.3	444.1	529.4	461.6	380.7	343.5	330.3	310.7
82.5°	610.4	291.0	207.8	258.2	354.4	476.9	439.7	328.2	282.2	262.5	240.6
85°	273.5	179.4	166.3	196.9	269.1	391.6	396.0	269.1	216.6	258.2	190.3
87.5°	100.6	80.9	80.9	100.6	155.3	164.1	280.0	172.8	137.8	94.1	74.4
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)