

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: P397826

Luminaire Tested: **ARCH-S-PA1-50-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-727-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4489 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

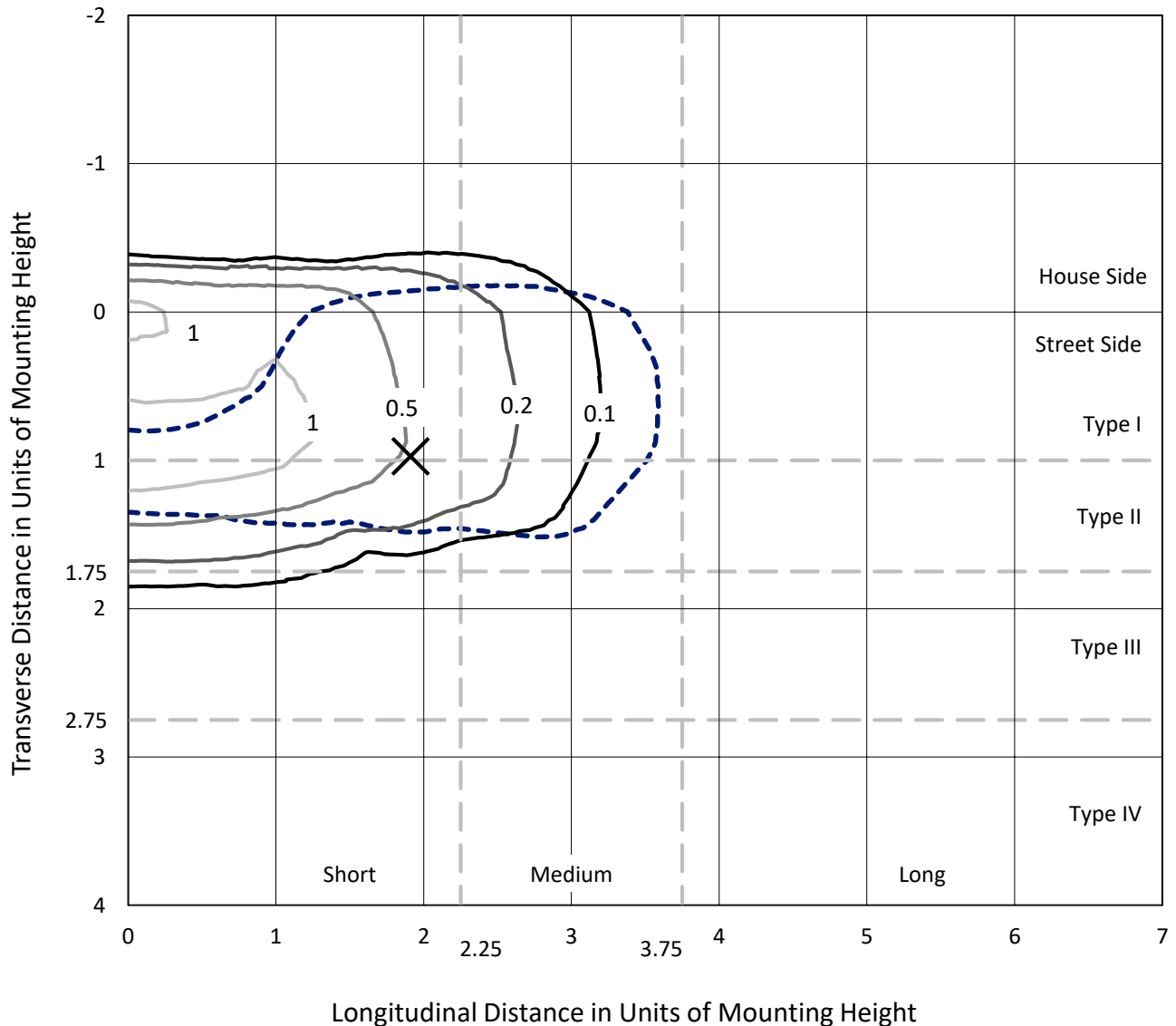
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

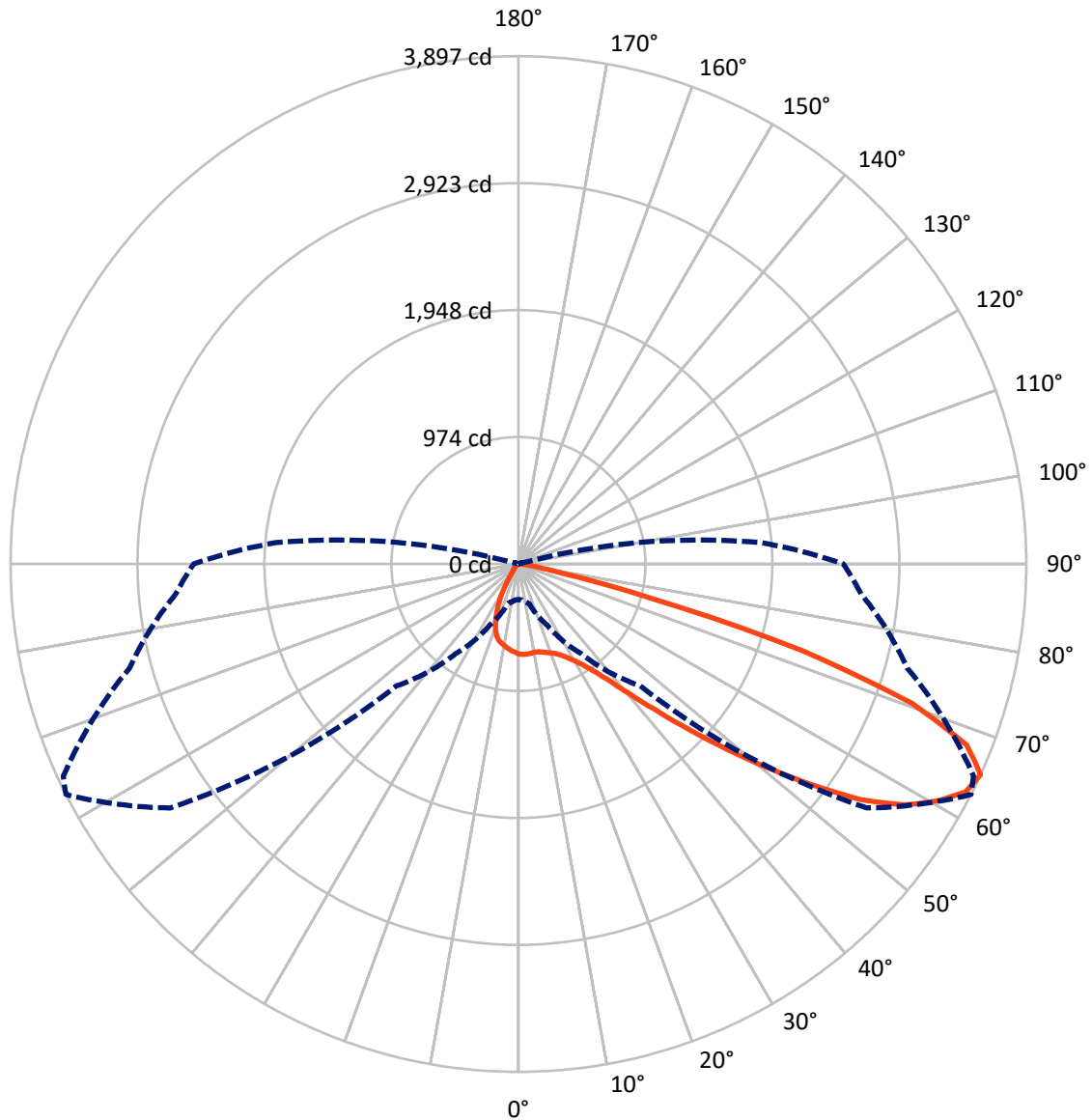
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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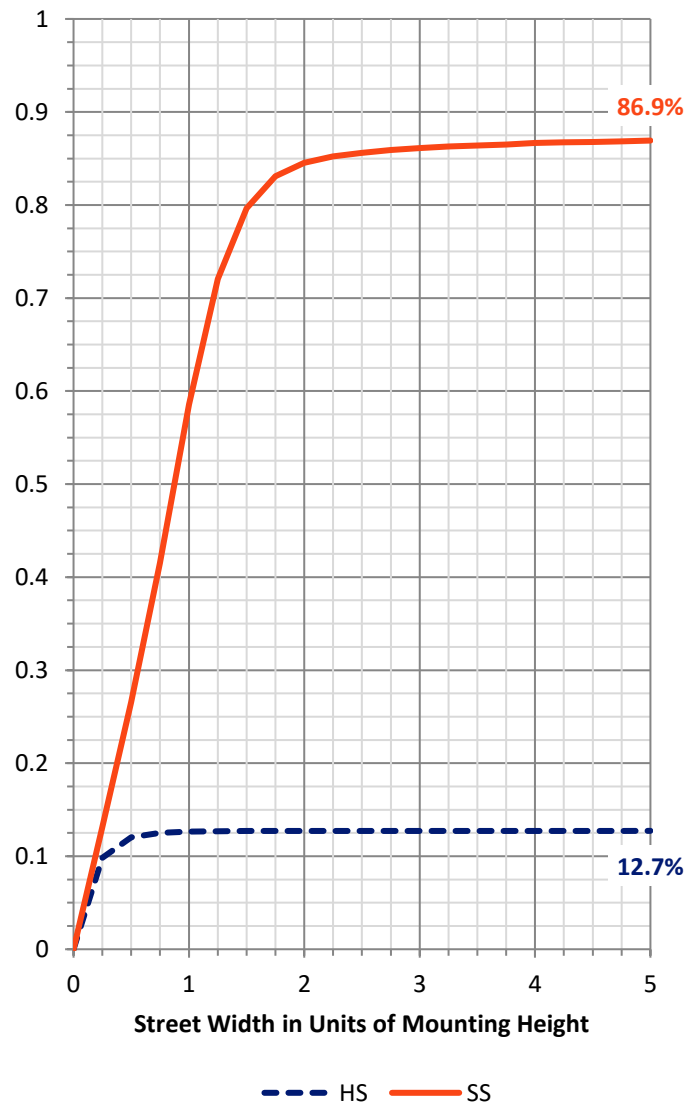
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	577.7	0.0	577.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3911.3	0.0	3911.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	4489.0	0.0	4489.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.4
10°-20°	155.7	3.5
20°-30°	230.7	5.1
30°-40°	428.4	9.5
40°-50°	907.5	20.2
50°-60°	1254.9	28.0
60°-70°	1004.6	22.4
70°-80°	417.4	9.3
80°-90°	26.8	0.6
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°	4489.0	100.0
0°-180°	4489.0	100.0



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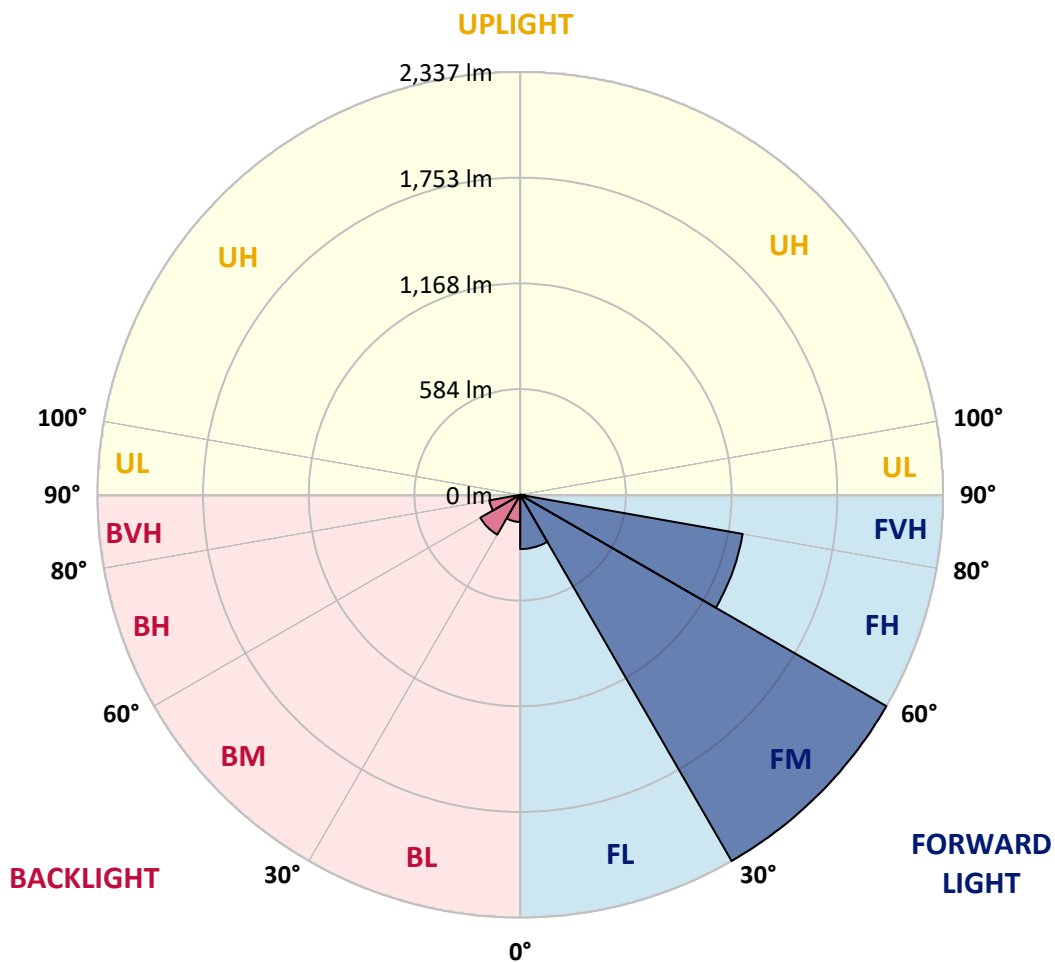
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	299.8	6.7			
FM	(30°-60°)	2337.0	52.1			
FH	(60°-80°)	1248.9	27.8			G1/1800
FVH	(80°-90°)	25.6	0.6			G1/100
BL	(0°-30°)	149.7	3.3	B1/500		
BM	(30°-60°)	253.8	5.7	B1/1000		
BH	(60°-80°)	173.0	3.9	B1/500		G1/500
BVH	(80°-90°)	1.2	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5
2.5°	703.4	701.7	700.0	699.2	699.2	698.3	694.9	694.1	692.4	690.7	689.0
5°	696.6	694.1	693.2	694.1	694.9	696.6	694.9	694.9	693.2	691.5	688.1
7.5°	679.7	678.0	678.8	681.4	682.2	688.1	689.0	691.5	691.5	689.8	687.3
10°	659.3	658.5	658.5	662.7	667.0	675.4	681.4	688.1	689.0	689.0	684.8
12.5°	644.1	643.2	645.8	650.9	659.3	670.3	680.5	690.7	692.4	693.2	686.4
15°	634.8	634.8	638.1	648.3	660.2	675.4	687.3	700.9	702.5	701.7	692.4
17.5°	626.3	627.1	633.9	650.9	664.4	684.8	699.2	714.4	715.3	714.4	699.2
20°	622.9	624.6	634.8	656.8	672.0	694.9	713.6	728.8	729.7	726.3	705.9
22.5°	632.2	633.1	645.8	669.5	683.9	709.3	733.1	747.5	748.3	743.2	716.1
25°	664.4	664.4	675.4	695.8	708.5	733.9	759.3	776.3	776.3	770.3	739.0
27.5°	739.8	733.1	730.5	736.4	740.7	767.8	794.9	816.1	815.3	806.8	768.7
30°	885.6	868.7	841.5	811.0	795.8	814.4	839.8	867.0	866.1	852.6	805.1
32.5°	1130.5	1105.9	1041.5	961.0	895.8	874.6	898.3	928.0	928.8	912.7	863.6
35°	1473.7	1434.8	1319.5	1207.6	1058.5	978.0	984.8	1017.0	1027.1	1018.7	961.9
37.5°	1804.3	1768.7	1658.5	1503.4	1300.9	1136.5	1107.6	1135.6	1147.5	1147.5	1087.3
40°	2137.3	2095.8	1998.3	1842.4	1628.8	1383.9	1280.5	1303.4	1316.1	1318.7	1239.8
42.5°	2404.3	2377.1	2302.6	2181.4	1981.4	1817.8	1529.7	1517.0	1528.8	1519.5	1417.0
45°	2589.0	2567.8	2516.1	2470.4	2372.9	2290.7	1862.7	1777.1	1784.8	1752.6	1616.1
47.5°	2627.1	2603.4	2592.4	2656.0	2725.5	2745.8	2272.1	2086.5	2078.8	2007.6	1822.9
50°	2461.0	2463.6	2504.3	2685.6	2975.5	3158.5	2746.6	2435.6	2407.7	2249.2	2015.3
52.5°	2102.6	2143.2	2245.8	2539.9	3051.7	3458.5	3221.2	2806.0	2762.7	2483.9	2159.3
55°	1644.9	1697.5	1866.1	2204.3	2892.4	3592.4	3621.2	3190.7	3092.4	2660.2	2271.2
57.5°	1222.9	1239.0	1435.6	1744.1	2515.3	3461.1	3826.3	3487.3	3361.1	2800.9	2382.2
60°	761.9	772.0	979.7	1328.0	1905.1	2975.5	3826.3	3691.6	3571.2	2927.2	2483.9
62.5°	473.7	477.1	555.1	910.2	1294.9	2206.8	3667.8	3850.0	3753.4	3017.8	2571.2
65°	272.9	276.3	312.7	514.4	842.4	1321.2	3262.7	3896.7	3853.4	3089.9	2639.0
67.5°	199.2	200.8	215.3	289.0	550.9	678.8	2450.9	3709.4	3763.6	3125.5	2637.3
70°	172.9	175.4	194.1	225.4	397.5	417.0	1247.5	3203.4	3355.1	3074.6	2558.5
72.5°	133.1	136.4	164.4	211.9	291.5	300.0	451.7	2279.7	2509.3	2756.8	2342.4
75°	91.5	94.9	122.9	174.6	240.7	224.6	248.3	1049.2	1323.7	1849.2	1783.1
77.5°	58.5	59.3	77.1	127.1	207.6	159.3	170.3	342.4	480.5	836.4	841.5
80°	39.0	39.8	47.5	82.2	142.4	147.5	105.1	158.5	173.7	244.1	169.5
82.5°	23.7	23.7	32.2	51.7	86.4	122.0	68.6	83.1	89.0	94.1	44.1
85°	9.3	9.3	19.5	33.9	54.2	56.8	43.2	48.3	50.8	55.1	20.3
87.5°	2.5	2.5	11.0	18.6	23.7	26.3	26.3	23.7	25.4	31.4	10.2
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°	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5
2.5°	688.1	685.6	682.2	678.8	675.4	672.9	670.3	670.3	668.7	666.1	664.4
5°	686.4	682.2	674.6	668.7	659.3	652.5	647.5	643.2	640.7	634.8	633.9
7.5°	683.9	678.8	667.8	655.9	640.7	628.8	617.0	608.5	600.0	593.2	591.5
10°	679.7	673.7	657.6	640.7	619.5	597.5	569.5	537.3	507.6	490.7	485.6
12.5°	679.7	672.0	650.9	628.0	597.5	543.2	472.0	400.9	345.8	321.2	314.4
15°	683.9	673.7	645.8	614.4	557.6	447.5	332.2	238.1	178.0	159.3	155.1
17.5°	688.1	673.7	638.1	595.8	484.8	324.6	189.0	125.4	105.9	101.7	101.7
20°	689.8	672.0	628.0	561.0	387.3	201.7	112.7	94.1	86.4	83.9	83.9
22.5°	696.6	672.9	620.3	511.0	281.4	118.6	89.0	78.8	71.2	68.6	68.6
25°	713.6	683.1	622.0	447.5	180.5	89.8	75.4	65.3	57.6	54.2	54.2
27.5°	740.7	705.9	631.4	373.7	113.6	77.1	63.6	52.5	46.6	43.2	43.2
30°	771.2	731.4	635.6	289.0	84.7	65.3	51.7	41.5	37.3	34.7	33.9
32.5°	824.6	775.4	632.2	198.3	69.5	55.1	41.5	33.1	29.7	28.8	28.8
35°	910.2	852.6	625.4	124.6	57.6	44.1	33.1	27.1	24.6	23.7	22.9
37.5°	1026.3	965.3	605.1	82.2	47.5	34.7	27.1	22.9	20.3	19.5	19.5
40°	1167.8	1094.1	566.1	62.7	40.7	28.0	22.9	19.5	17.8	16.9	16.9
42.5°	1329.7	1237.3	504.2	54.2	33.9	23.7	19.5	16.1	15.3	14.4	14.4
45°	1506.8	1387.3	418.6	48.3	28.8	19.5	16.1	14.4	12.7	12.7	11.9
47.5°	1694.9	1538.2	322.0	42.4	24.6	16.9	14.4	11.9	11.0	10.2	10.2
50°	1876.3	1672.9	226.3	36.4	20.3	14.4	11.9	10.2	9.3	8.5	8.5
52.5°	2004.3	1754.3	160.2	31.4	16.9	12.7	9.3	7.6	6.8	6.8	6.8
55°	2106.8	1805.1	111.9	26.3	14.4	11.0	7.6	5.9	5.9	5.1	5.1
57.5°	2203.4	1838.2	82.2	22.0	11.9	8.5	5.9	4.2	4.2	3.4	3.4
60°	2303.4	1856.0	62.7	17.8	10.2	6.8	4.2	3.4	2.5	2.5	2.5
62.5°	2404.3	1867.0	48.3	14.4	8.5	5.1	3.4	2.5	1.7	0.8	0.8
65°	2492.4	1870.4	37.3	11.0	6.8	3.4	2.5	0.8	0.0	0.0	0.0
67.5°	2518.7	1831.4	28.8	8.5	5.1	2.5	1.7	0.0	0.0	0.0	0.0
70°	2447.5	1728.0	22.0	6.8	4.2	1.7	0.8	0.0	0.0	0.0	0.0
72.5°	2172.1	1449.2	16.9	4.2	3.4	1.7	0.8	0.0	0.0	0.0	0.0
75°	1554.3	772.9	11.9	3.4	2.5	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	715.3	299.2	8.5	2.5	1.7	0.8	0.0	0.0	0.0	0.0	0.0
80°	139.8	74.6	3.4	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.2	12.7	1.7	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.0	4.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.7	0.8	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)