

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: P398042

Luminaire Tested: **ARCH-S-PA1-80-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398042
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-PA1-80-727-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA 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: 6210 lumens
Efficiency: N/A
Efficacy: 74.8 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

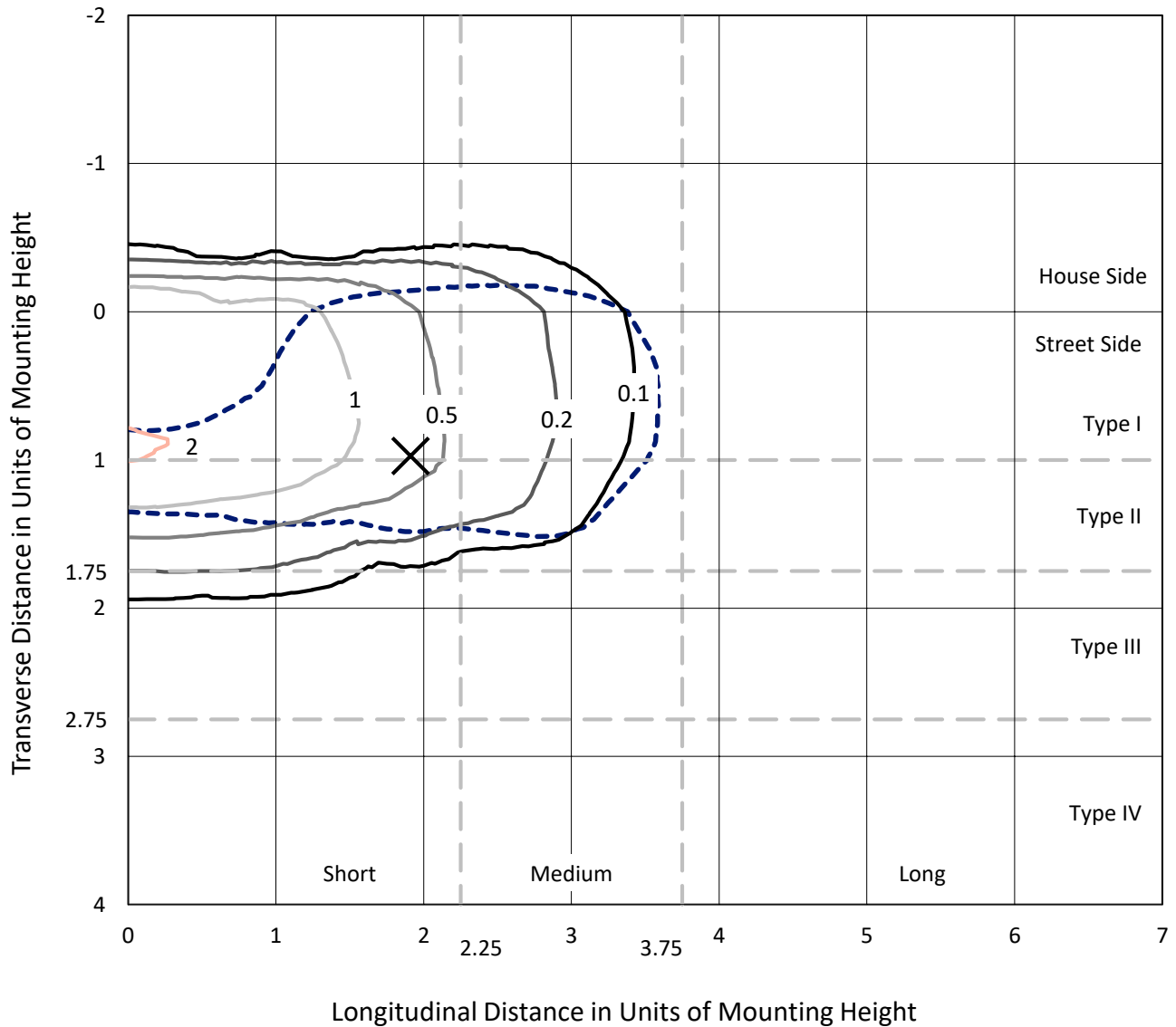
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

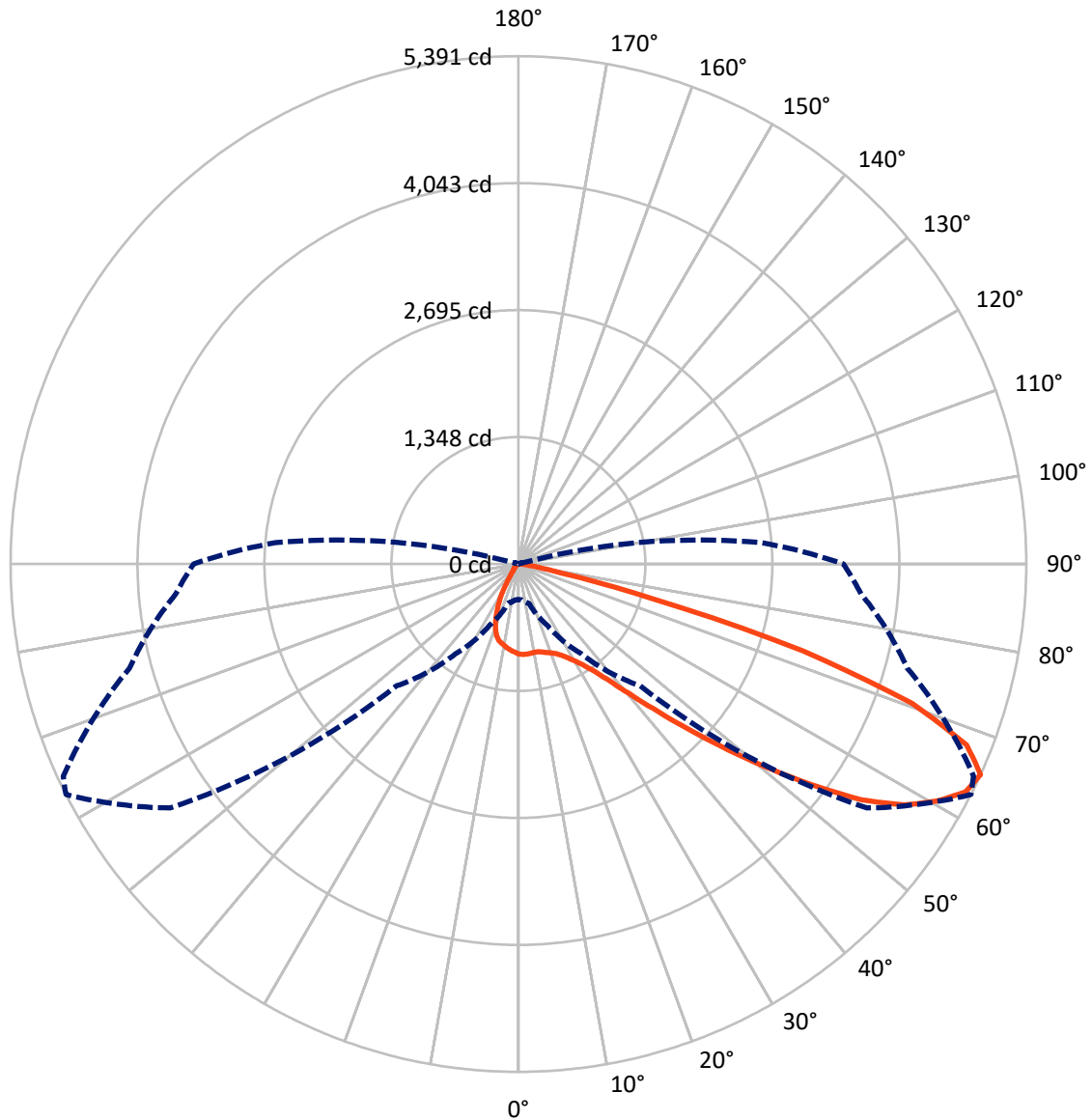
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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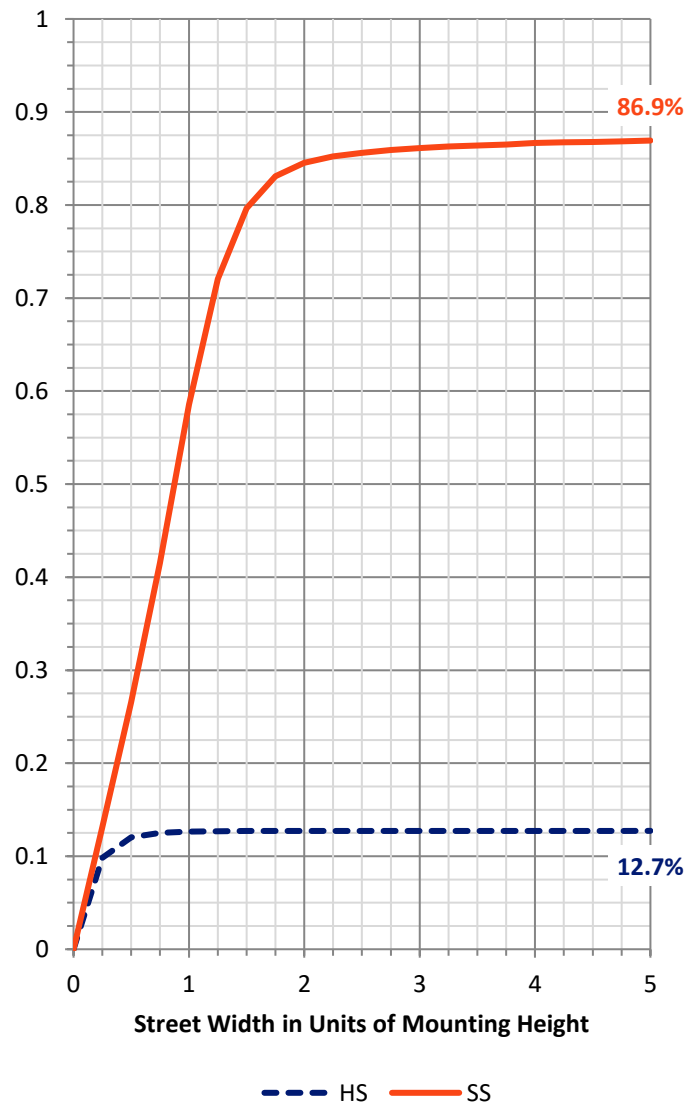
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	799.2	0.0	799.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5410.8	0.0	5410.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	6210.0	0.0	6210.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	1.4
10°-20°	215.3	3.5
20°-30°	319.2	5.1
30°-40°	592.6	9.5
40°-50°	1255.5	20.2
50°-60°	1736.0	28.0
60°-70°	1389.7	22.4
70°-80°	577.4	9.3
80°-90°	37.1	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°	6210.0	100.0
0°-180°	6210.0	100.0



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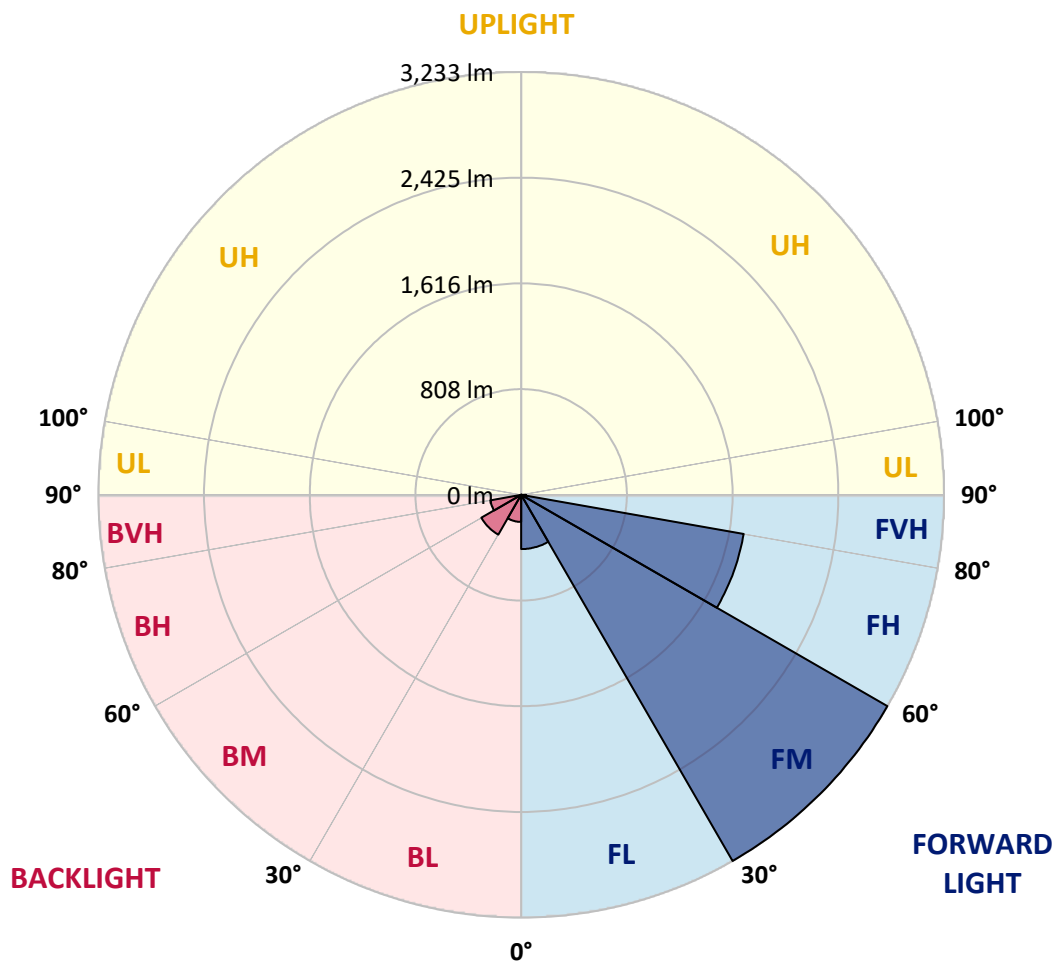
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	414.7	6.7			
FM (30°-60°)	3233.0	52.1			
FH (60°-80°)	1727.8	27.8			G1/1800
FVH (80°-90°)	35.4	0.6			G1/100
BL (0°-30°)	207.1	3.3	B1/500		
BM (30°-60°)	351.1	5.7	B1/1000		
BH (60°-80°)	239.3	3.9	B1/500		G1/500
BVH (80°-90°)	1.7	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°	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7
2.5°	973.1	970.7	968.4	967.2	967.2	966.0	961.3	960.2	957.8	955.5	953.1
5°	963.7	960.2	959.0	960.2	961.3	963.7	961.3	961.3	959.0	956.7	952.0
7.5°	940.2	937.9	939.1	942.6	943.8	952.0	953.1	956.7	956.7	954.3	950.8
10°	912.1	910.9	910.9	916.8	922.7	934.4	942.6	952.0	953.1	953.1	947.3
12.5°	891.0	889.8	893.3	900.4	912.1	927.3	941.4	955.5	957.8	959.0	949.6
15°	878.1	878.1	882.8	896.9	913.3	934.4	950.8	969.5	971.9	970.7	957.8
17.5°	866.4	867.6	876.9	900.4	919.1	947.3	967.2	988.3	989.5	988.3	967.2
20°	861.7	864.0	878.1	908.6	929.7	961.3	987.1	1008.2	1009.4	1004.7	976.6
22.5°	874.6	875.8	893.3	926.2	946.1	981.3	1014.1	1034.0	1035.2	1028.2	990.7
25°	919.1	919.1	934.4	962.5	980.1	1015.3	1050.4	1073.9	1073.9	1065.7	1022.3
27.5°	1023.5	1014.1	1010.6	1018.8	1024.7	1062.2	1099.7	1129.0	1127.8	1116.1	1063.3
30°	1225.1	1201.7	1164.2	1122.0	1100.9	1126.6	1161.8	1199.3	1198.2	1179.4	1113.8
32.5°	1563.9	1529.9	1440.8	1329.5	1239.2	1209.9	1242.7	1283.7	1284.9	1262.6	1194.6
35°	2038.8	1984.8	1825.4	1670.6	1464.3	1352.9	1362.3	1406.8	1420.9	1409.2	1330.6
37.5°	2496.0	2446.7	2294.3	2079.8	1799.6	1572.1	1532.3	1571.0	1587.4	1587.4	1504.2
40°	2956.7	2899.3	2764.4	2548.7	2253.3	1914.5	1771.5	1803.1	1820.7	1824.2	1715.2
42.5°	3326.0	3288.5	3185.3	3017.7	2741.0	2514.7	2116.1	2098.5	2115.0	2102.1	1960.2
45°	3581.6	3552.3	3480.8	3417.5	3282.6	3168.9	2576.9	2458.5	2469.0	2424.5	2235.7
47.5°	3634.3	3601.5	3586.3	3674.2	3770.3	3798.5	3143.1	2886.4	2875.8	2777.3	2521.8
50°	3404.6	3408.1	3464.4	3715.2	4116.2	4369.4	3799.7	3369.4	3330.7	3111.5	2787.9
52.5°	2908.6	2964.9	3106.8	3513.6	4221.7	4784.4	4456.2	3881.7	3821.9	3436.2	2987.2
55°	2275.6	2348.3	2581.6	3049.3	4001.3	4969.7	5009.5	4414.0	4278.0	3680.1	3142.0
57.5°	1691.7	1714.0	1986.0	2412.7	3479.6	4788.0	5293.3	4824.3	4649.6	3874.7	3295.5
60°	1054.0	1068.0	1355.3	1837.1	2635.5	4116.2	5293.3	5106.8	4940.4	4049.4	3436.2
62.5°	655.4	660.0	767.9	1259.1	1791.4	3052.9	5074.0	5326.1	5192.4	4174.8	3557.0
65°	377.5	382.2	432.6	711.6	1165.3	1827.7	4513.6	5390.6	5330.8	4274.5	3650.8
67.5°	275.5	277.9	297.8	399.8	762.0	939.1	3390.5	5131.5	5206.5	4323.7	3648.4
70°	239.2	242.7	268.5	311.9	549.8	576.8	1725.7	4431.6	4641.4	4253.4	3539.4
72.5°	184.1	188.8	227.4	293.1	403.3	415.0	624.9	3153.7	3471.4	3813.7	3240.4
75°	126.6	131.3	170.0	241.5	333.0	310.7	343.5	1451.4	1831.2	2558.1	2466.7
77.5°	80.9	82.1	106.7	175.9	287.2	220.4	235.6	473.6	664.7	1157.1	1164.2
80°	53.9	55.1	65.7	113.7	197.0	204.0	145.4	219.2	240.3	337.6	234.5
82.5°	32.8	32.8	44.6	71.5	119.6	168.8	95.0	114.9	123.1	130.1	61.0
85°	12.9	12.9	27.0	46.9	75.0	78.5	59.8	66.8	70.3	76.2	28.1
87.5°	3.5	3.5	15.2	25.8	32.8	36.3	36.3	32.8	35.2	43.4	14.1
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°	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7	956.7
2.5°	952.0	948.4	943.8	939.1	934.4	930.9	927.3	927.3	925.0	921.5	919.1
5°	949.6	943.8	933.2	925.0	912.1	902.7	895.7	889.8	886.3	878.1	876.9
7.5°	946.1	939.1	923.8	907.4	886.3	869.9	853.5	841.8	830.0	820.7	818.3
10°	940.2	932.0	909.8	886.3	857.0	826.5	787.8	743.3	702.2	678.8	671.8
12.5°	940.2	929.7	900.4	868.7	826.5	751.5	653.0	554.5	478.3	444.3	434.9
15°	946.1	932.0	893.3	850.0	771.4	619.0	459.6	329.4	246.2	220.4	214.5
17.5°	952.0	932.0	882.8	824.2	670.6	449.0	261.4	173.5	146.5	140.7	140.7
20°	954.3	929.7	868.7	776.1	535.8	279.0	155.9	130.1	119.6	116.1	116.1
22.5°	963.7	930.9	858.2	706.9	389.2	164.1	123.1	109.0	98.5	95.0	95.0
25°	987.1	944.9	860.5	619.0	249.7	124.3	104.3	90.3	79.7	75.0	75.0
27.5°	1024.7	976.6	873.4	517.0	157.1	106.7	87.9	72.7	64.5	59.8	59.8
30°	1066.9	1011.8	879.3	399.8	117.2	90.3	71.5	57.4	51.6	48.1	46.9
32.5°	1140.7	1072.7	874.6	274.3	96.1	76.2	57.4	45.7	41.0	39.9	39.9
35°	1259.1	1179.4	865.2	172.3	79.7	61.0	45.7	37.5	34.0	32.8	31.7
37.5°	1419.7	1335.3	837.1	113.7	65.7	48.1	37.5	31.7	28.1	27.0	27.0
40°	1615.5	1513.5	783.1	86.8	56.3	38.7	31.7	27.0	24.6	23.4	23.4
42.5°	1839.4	1711.7	697.6	75.0	46.9	32.8	27.0	22.3	21.1	19.9	19.9
45°	2084.5	1919.2	579.2	66.8	39.9	27.0	22.3	19.9	17.6	17.6	16.4
47.5°	2344.7	2127.9	445.5	58.6	34.0	23.4	19.9	16.4	15.2	14.1	14.1
50°	2595.6	2314.3	313.0	50.4	28.1	19.9	16.4	14.1	12.9	11.7	11.7
52.5°	2772.7	2426.8	221.6	43.4	23.4	17.6	12.9	10.6	9.4	9.4	9.4
55°	2914.5	2497.1	154.8	36.3	19.9	15.2	10.6	8.2	8.2	7.0	7.0
57.5°	3048.2	2542.9	113.7	30.5	16.4	11.7	8.2	5.9	5.9	4.7	4.7
60°	3186.5	2567.5	86.8	24.6	14.1	9.4	5.9	4.7	3.5	3.5	3.5
62.5°	3326.0	2582.7	66.8	19.9	11.7	7.0	4.7	3.5	2.3	1.2	1.2
65°	3447.9	2587.4	51.6	15.2	9.4	4.7	3.5	1.2	0.0	0.0	0.0
67.5°	3484.3	2533.5	39.9	11.7	7.0	3.5	2.3	0.0	0.0	0.0	0.0
70°	3385.8	2390.5	30.5	9.4	5.9	2.3	1.2	0.0	0.0	0.0	0.0
72.5°	3004.8	2004.8	23.4	5.9	4.7	2.3	1.2	0.0	0.0	0.0	0.0
75°	2150.1	1069.2	16.4	4.7	3.5	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	989.5	413.8	11.7	3.5	2.3	1.2	0.0	0.0	0.0	0.0	0.0
80°	193.4	103.2	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.6	17.6	2.3	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.2	5.9	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.9	2.3	1.2	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)