

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: P572729

Luminaire Tested: **ARCH-S-PA2-110-727-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572729  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-110-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

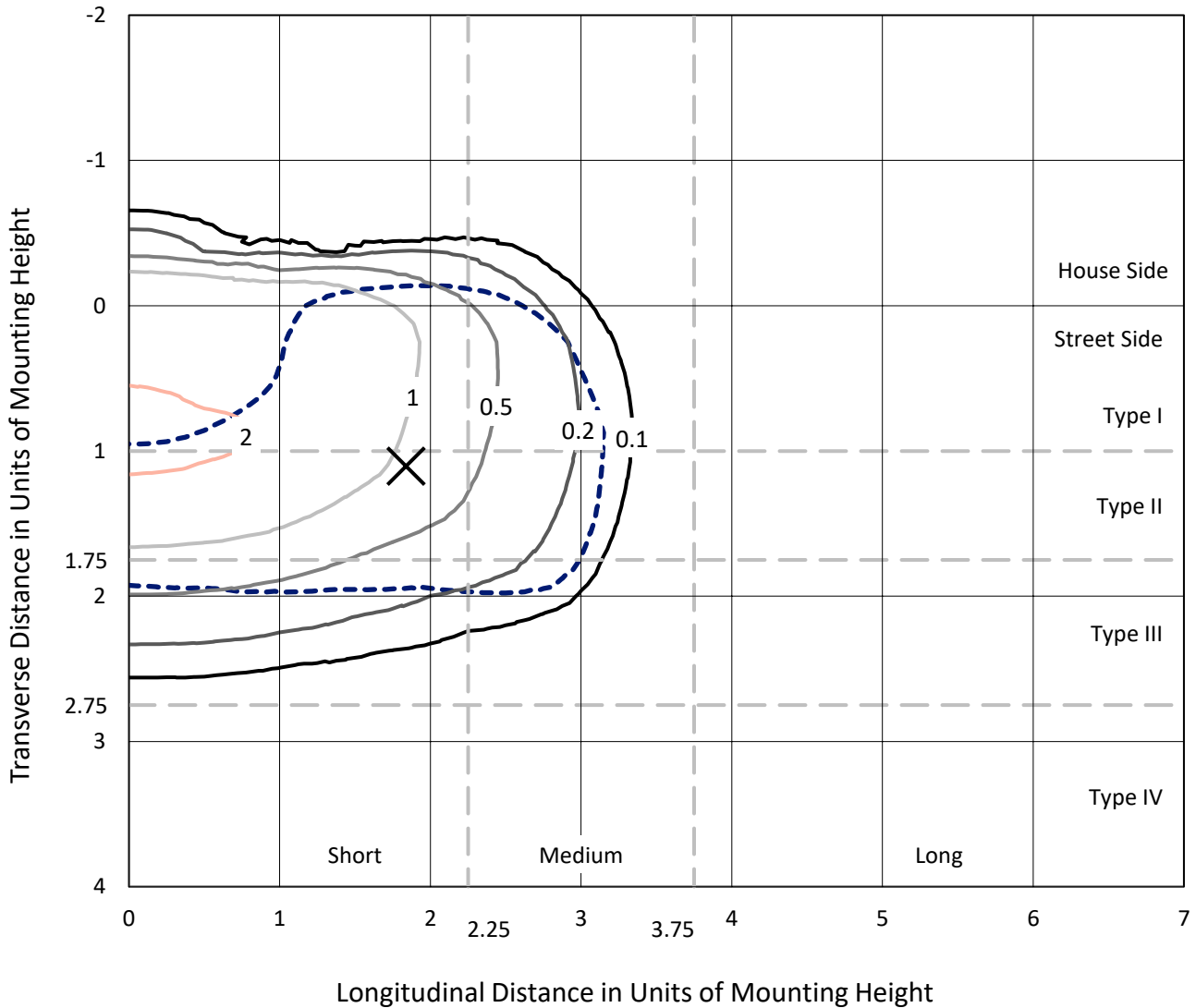
Lumens per Lamp: N/A  
Luminaire Lumens: 9358 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: 24 FT



REPORT NUMBER: P572729  
 CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

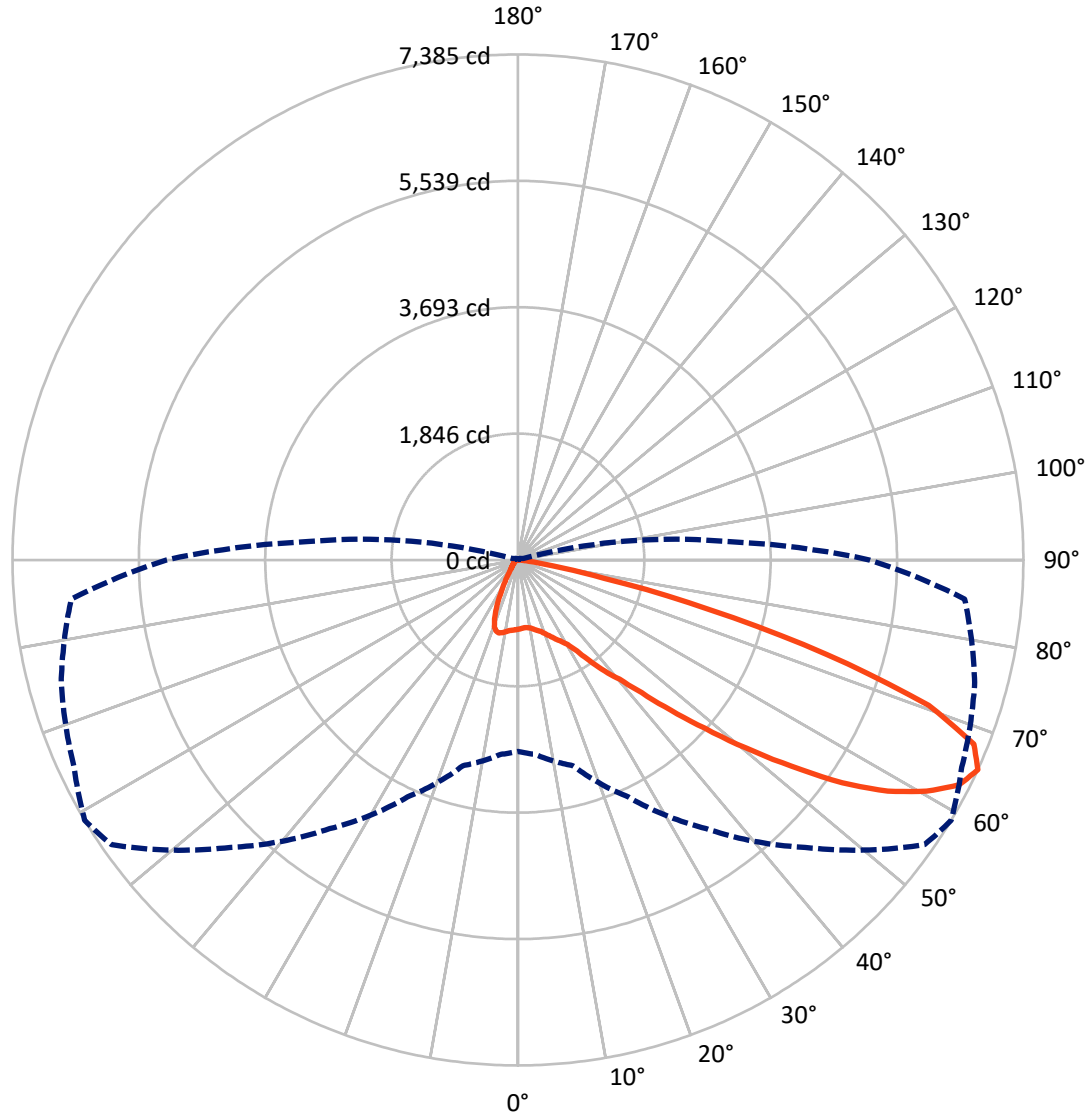
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P572729  
CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P572729  
 CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

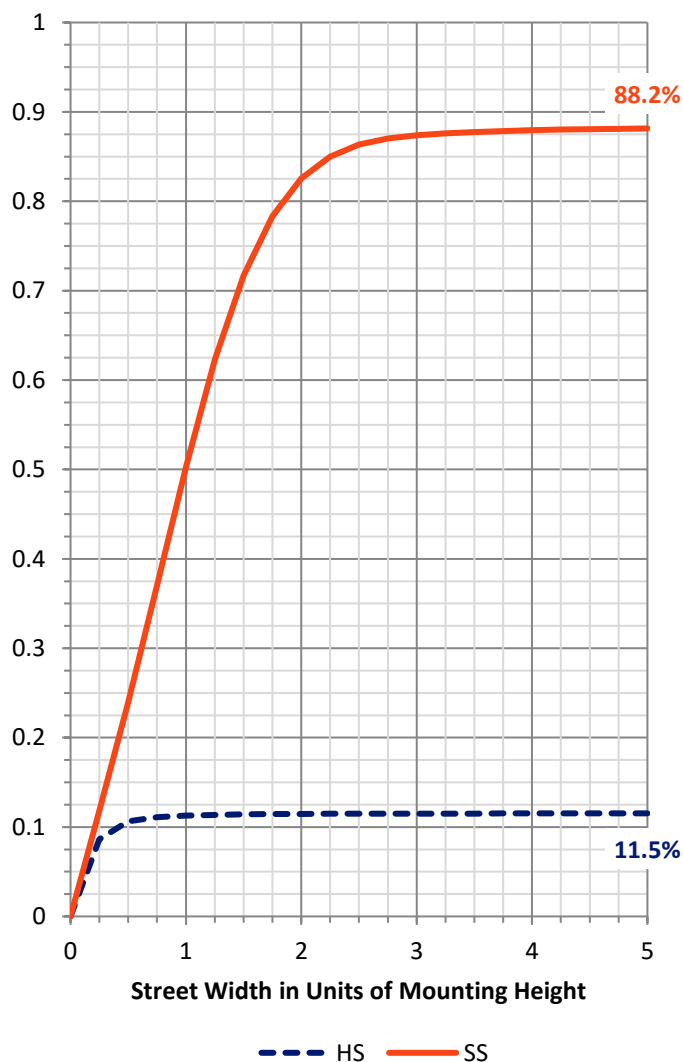
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1091.7	0.0	1091.7
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	8266.3	0.0	8266.3
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	9358.0	0.0	9358.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.5	1.0
10°-20°	271.5	2.9
20°-30°	461.1	4.9
30°-40°	816.7	8.7
40°-50°	1540.7	16.5
50°-60°	2606.8	27.9
60°-70°	2710.3	29.0
70°-80°	812.7	8.7
80°-90°	42.6	0.5
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°	9358.0	100.0
0°-180°	9358.0	100.0

**Coefficient of Utilization**

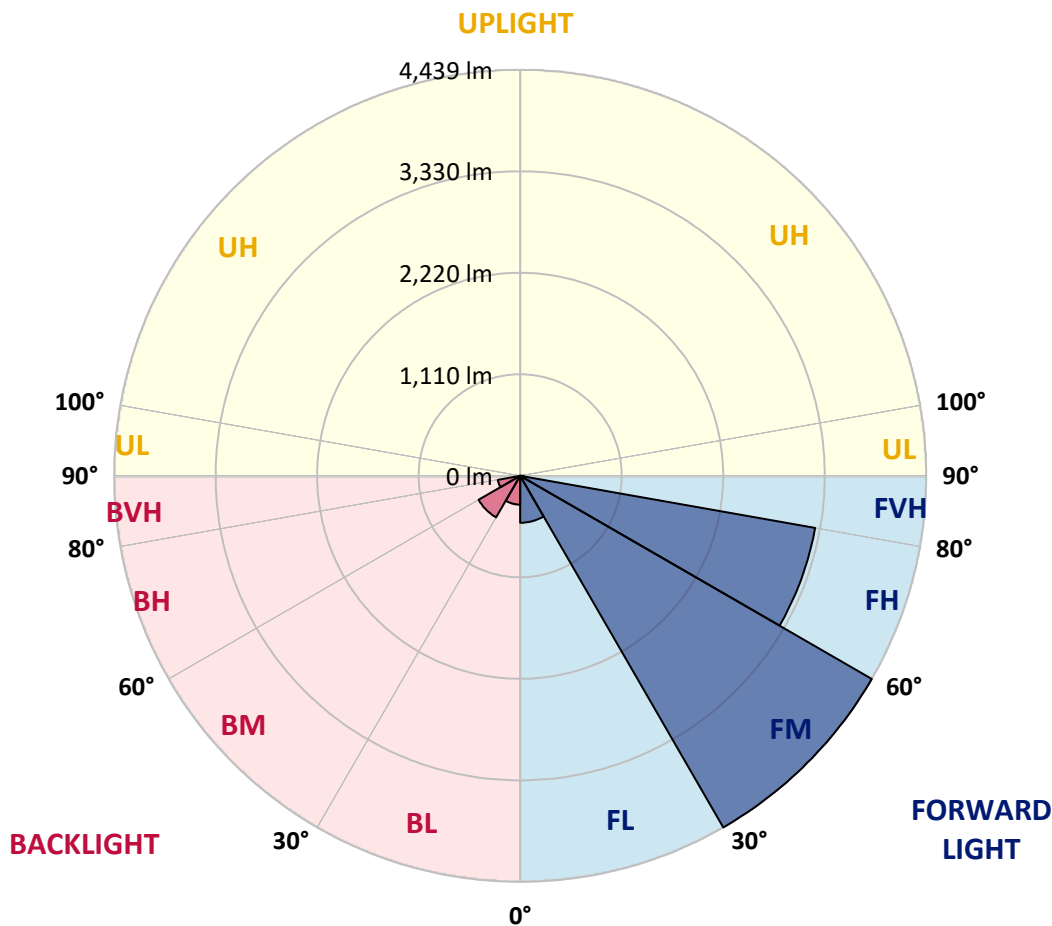


REPORT NUMBER: P572729  
 CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	513.2	5.5			
FM (30°-60°)	4439.5	47.4			
FH (60°-80°)	3274.6	35.0			G2/5000
FVH (80°-90°)	39.0	0.4			G1/100
BL (0°-30°)	314.9	3.4	B1/500		
BM (30°-60°)	524.8	5.6	B1/1000		
BH (60°-80°)	248.4	2.7	B1/500		G1/500
BVH (80°-90°)	3.6	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 III Short





REPORT NUMBER: P572729

CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2
2.5°	984.0	980.6	980.6	987.4	990.8	994.2	1001.0	1001.0	1001.0	1007.8	1011.2
5°	936.3	936.3	939.7	946.5	960.2	970.4	990.8	994.2	997.6	1014.6	1021.4
7.5°	905.7	905.7	909.1	922.7	939.7	963.6	990.8	997.6	1007.8	1031.7	1048.7
10°	902.3	898.9	905.7	919.3	939.7	970.4	1001.0	1011.2	1031.7	1062.3	1086.1
12.5°	912.5	909.1	915.9	929.5	949.9	980.6	1021.4	1038.5	1062.3	1103.2	1137.2
15°	919.3	915.9	922.7	939.7	963.6	1001.0	1048.7	1069.1	1099.7	1157.6	1191.7
17.5°	939.7	936.3	939.7	953.3	977.2	1018.0	1079.3	1099.7	1150.8	1215.5	1253.0
20°	1031.7	1028.2	1007.8	1001.0	1004.4	1041.9	1120.2	1154.2	1215.5	1297.2	1324.5
22.5°	1222.3	1208.7	1171.3	1110.0	1069.1	1082.7	1171.3	1208.7	1290.4	1382.3	1402.8
25°	1477.7	1467.5	1413.0	1307.4	1191.7	1157.6	1229.1	1280.2	1378.9	1481.1	1474.3
27.5°	1767.1	1746.7	1695.6	1549.2	1392.6	1280.2	1300.6	1344.9	1453.8	1562.8	1528.8
30°	2019.0	2012.2	1954.4	1831.8	1647.9	1481.1	1409.6	1433.4	1532.2	1647.9	1607.1
32.5°	2250.6	2230.1	2182.5	2066.7	1896.5	1726.2	1583.2	1583.2	1664.9	1801.1	1739.9
35°	2505.9	2492.3	2434.4	2318.7	2155.2	1954.4	1825.0	1811.4	1879.4	2032.7	1899.9
37.5°	2768.1	2734.1	2706.8	2587.6	2424.2	2250.6	2094.0	2063.3	2097.4	2209.7	2046.3
40°	3095.0	3095.0	3033.7	2924.7	2771.5	2587.6	2369.7	2291.4	2281.2	2427.6	2301.6
42.5°	3476.3	3466.1	3415.0	3312.9	3166.5	2996.2	2720.4	2648.9	2642.1	2819.2	2669.4
45°	3915.5	3908.7	3847.4	3762.3	3660.2	3472.9	3200.5	3129.0	3088.2	3292.4	3115.4
47.5°	4317.3	4293.4	4273.0	4283.2	4225.4	4014.3	3758.9	3673.8	3670.4	3830.4	3602.3
50°	4593.1	4579.5	4651.0	4719.0	4828.0	4695.2	4392.2	4317.3	4259.4	4470.5	4109.6
52.5°	4773.5	4766.7	4909.7	5103.8	5328.5	5318.3	5049.3	5005.1	4957.4	5015.3	4562.4
55°	4845.0	4845.0	5015.3	5372.8	5767.7	5938.0	5812.0	5750.7	5583.9	5464.7	5059.5
57.5°	4759.9	4749.7	4971.0	5437.5	6040.1	6390.8	6445.3	6373.8	6111.6	5978.8	5611.1
60°	4399.0	4405.8	4668.0	5257.0	6019.7	6574.7	6925.4	6860.7	6598.5	6401.0	6074.2
62.5°	3724.8	3782.7	4058.5	4698.6	5583.9	6428.3	7201.1	7235.2	6952.6	6707.5	6486.1
65°	2798.7	2849.8	3112.0	3820.2	4790.6	5938.0	7252.2	7385.0	7156.9	6908.3	6550.8
67.5°	1702.4	1719.4	2039.5	2574.0	3527.4	4947.2	6894.7	7184.1	7020.7	6612.1	5910.7
70°	793.3	837.6	994.2	1406.2	2233.5	3643.1	5958.4	6367.0	6183.1	5675.8	4494.3
72.5°	309.8	323.5	422.2	650.3	1184.9	2291.4	4446.7	4719.0	4593.1	4031.3	2679.6
75°	153.2	163.4	204.3	309.8	541.4	946.5	2717.0	2894.1	2686.4	2025.9	1133.8
77.5°	112.4	112.4	136.2	190.7	296.2	350.7	1144.0	1283.6	1212.1	783.1	309.8
80°	74.9	81.7	95.3	129.4	187.3	170.2	432.4	514.1	429.0	241.7	109.0
82.5°	44.3	47.7	71.5	91.9	126.0	98.7	146.4	163.4	177.0	119.2	51.1
85°	23.8	23.8	47.7	68.1	68.1	44.3	51.1	57.9	68.1	71.5	27.2
87.5°	6.8	6.8	30.6	40.9	27.2	23.8	27.2	27.2	30.6	37.5	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P572729  
 CATALOG NUMBER: ARCH-S-PA2-110-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2
2.5°	1014.6	1014.6	1018.0	1018.0	1021.4	1021.4	1021.4	1021.4	1024.8	1028.2	1028.2
5°	1024.8	1028.2	1028.2	1028.2	1028.2	1021.4	1018.0	1014.6	1014.6	1018.0	1018.0
7.5°	1052.1	1055.5	1052.1	1045.3	1035.1	1021.4	1007.8	1007.8	1004.4	1007.8	1004.4
10°	1092.9	1092.9	1089.5	1072.5	1055.5	1028.2	1001.0	980.6	967.0	963.6	956.7
12.5°	1144.0	1144.0	1133.8	1103.2	1072.5	1021.4	949.9	881.8	827.4	803.5	796.7
15°	1195.1	1195.1	1181.5	1137.2	1075.9	953.3	803.5	660.5	578.8	544.8	524.3
17.5°	1256.4	1249.6	1225.7	1164.4	1038.5	817.2	575.4	429.0	364.3	333.7	333.7
20°	1321.1	1314.3	1270.0	1167.8	943.1	585.6	374.5	296.2	279.2	272.4	272.4
22.5°	1392.6	1375.5	1307.4	1140.6	742.2	398.4	282.6	262.2	255.4	252.0	252.0
25°	1450.4	1423.2	1334.7	1065.7	531.1	279.2	248.6	241.7	228.1	224.7	217.9
27.5°	1494.7	1453.8	1344.9	905.7	350.7	231.5	221.3	207.7	194.1	180.5	180.5
30°	1552.6	1501.5	1351.7	704.8	238.3	200.9	190.7	173.6	156.6	143.0	143.0
32.5°	1668.4	1593.4	1355.1	493.7	197.5	177.0	156.6	136.2	119.2	112.4	109.0
35°	1794.3	1692.2	1317.7	320.1	173.6	149.8	126.0	109.0	91.9	88.5	88.5
37.5°	1933.9	1838.6	1235.9	217.9	153.2	126.0	102.1	85.1	74.9	71.5	71.5
40°	2168.9	2056.5	1099.7	173.6	132.8	105.5	85.1	71.5	64.7	61.3	61.3
42.5°	2505.9	2311.9	929.5	149.8	115.8	88.5	68.1	57.9	54.5	51.1	51.1
45°	2894.1	2597.9	732.0	136.2	102.1	74.9	57.9	51.1	47.7	44.3	44.3
47.5°	3340.1	2894.1	578.8	119.2	88.5	64.7	51.1	44.3	40.9	37.5	37.5
50°	3762.3	3125.6	435.8	105.5	78.3	54.5	44.3	40.9	37.5	34.0	34.0
52.5°	4109.6	3282.2	330.3	91.9	68.1	47.7	40.9	37.5	30.6	30.6	30.6
55°	4528.4	3404.8	252.0	81.7	61.3	44.3	37.5	30.6	27.2	23.8	23.8
57.5°	4892.7	3449.1	183.9	71.5	54.5	40.9	34.0	27.2	20.4	17.0	17.0
60°	5137.8	3411.6	132.8	61.3	47.7	34.0	27.2	20.4	13.6	10.2	10.2
62.5°	5311.5	3329.9	102.1	54.5	40.9	30.6	23.8	17.0	10.2	6.8	6.8
65°	5137.8	3077.9	81.7	47.7	34.0	27.2	17.0	13.6	6.8	3.4	3.4
67.5°	4443.3	2580.8	64.7	40.9	30.6	23.8	17.0	10.2	3.4	0.0	0.0
70°	3193.7	1842.0	54.5	37.5	27.2	20.4	13.6	6.8	3.4	0.0	0.0
72.5°	1780.7	949.9	51.1	34.0	27.2	20.4	13.6	6.8	3.4	0.0	0.0
75°	721.8	326.9	47.7	34.0	27.2	17.0	13.6	6.8	3.4	0.0	0.0
77.5°	211.1	112.4	40.9	30.6	27.2	20.4	13.6	6.8	3.4	0.0	0.0
80°	74.9	51.1	30.6	27.2	20.4	17.0	13.6	10.2	3.4	0.0	0.0
82.5°	34.0	20.4	13.6	10.2	10.2	10.2	10.2	6.8	3.4	0.0	0.0
85°	13.6	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0
87.5°	10.2	6.8	3.4	3.4	3.4	3.4	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)