

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: P573401

Luminaire Tested: **ARCH-S-PA2-70-740-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573401  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-740-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10744 lumens  
Efficiency: N/A  
Efficacy: 146.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

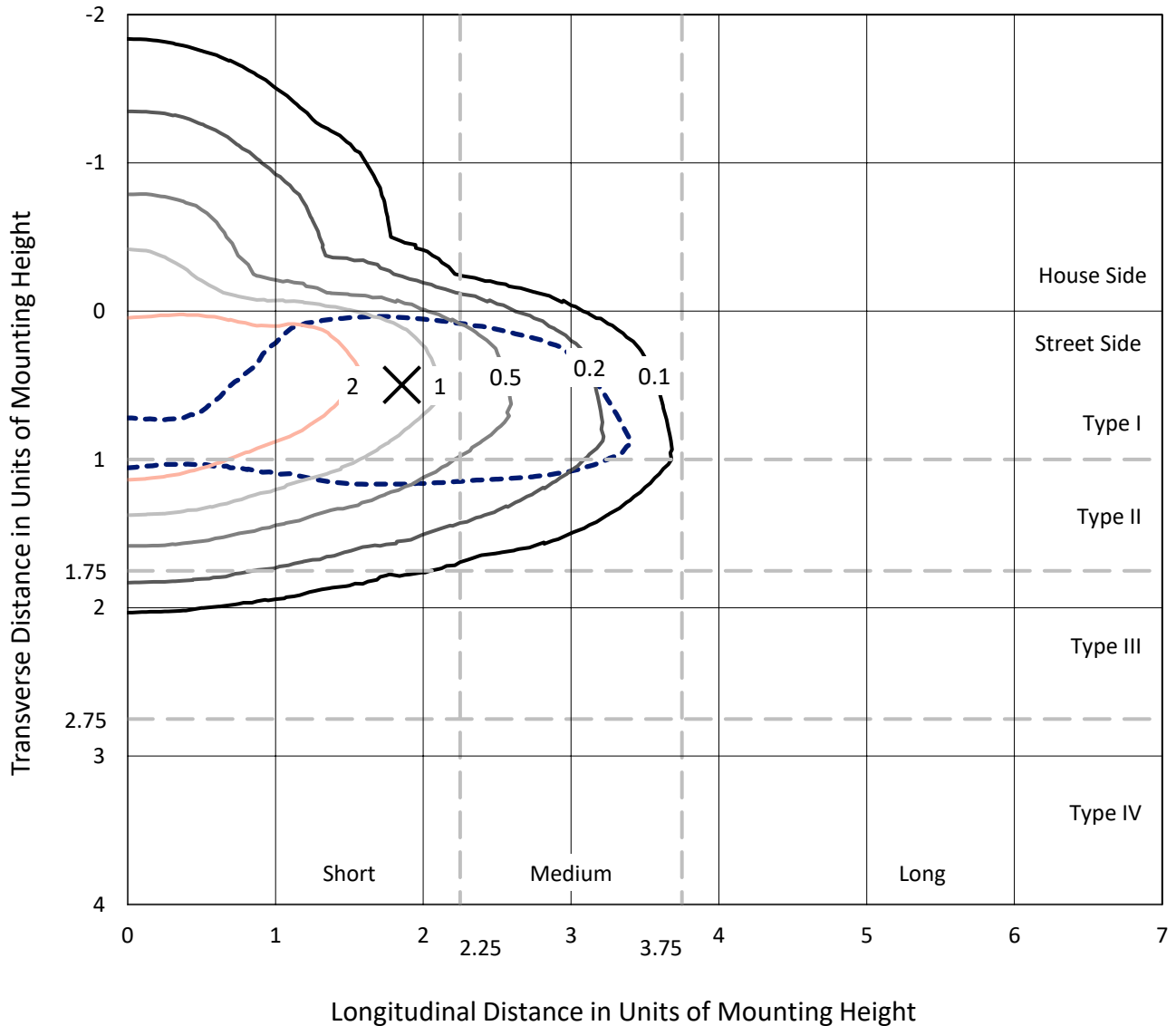
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

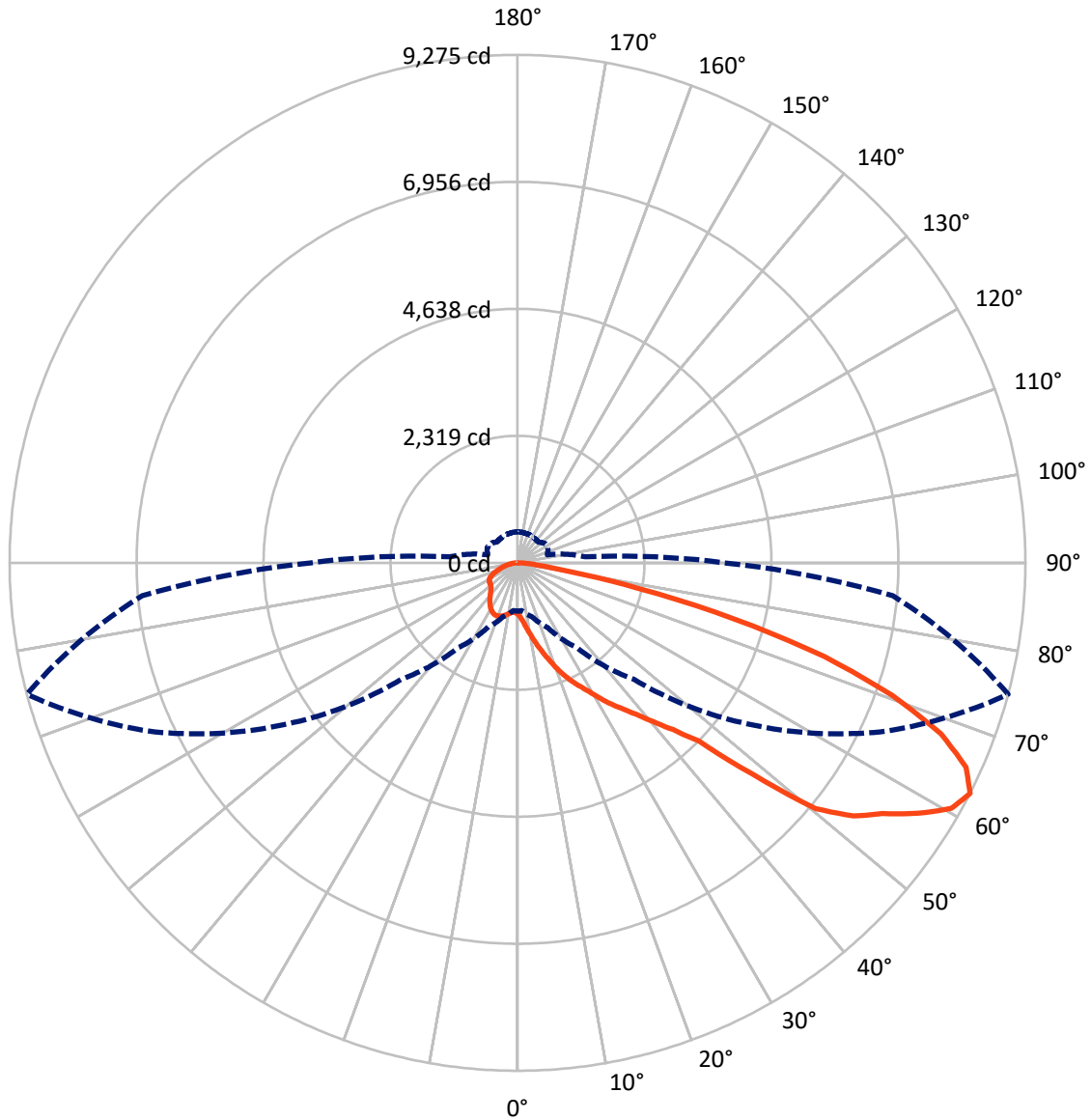
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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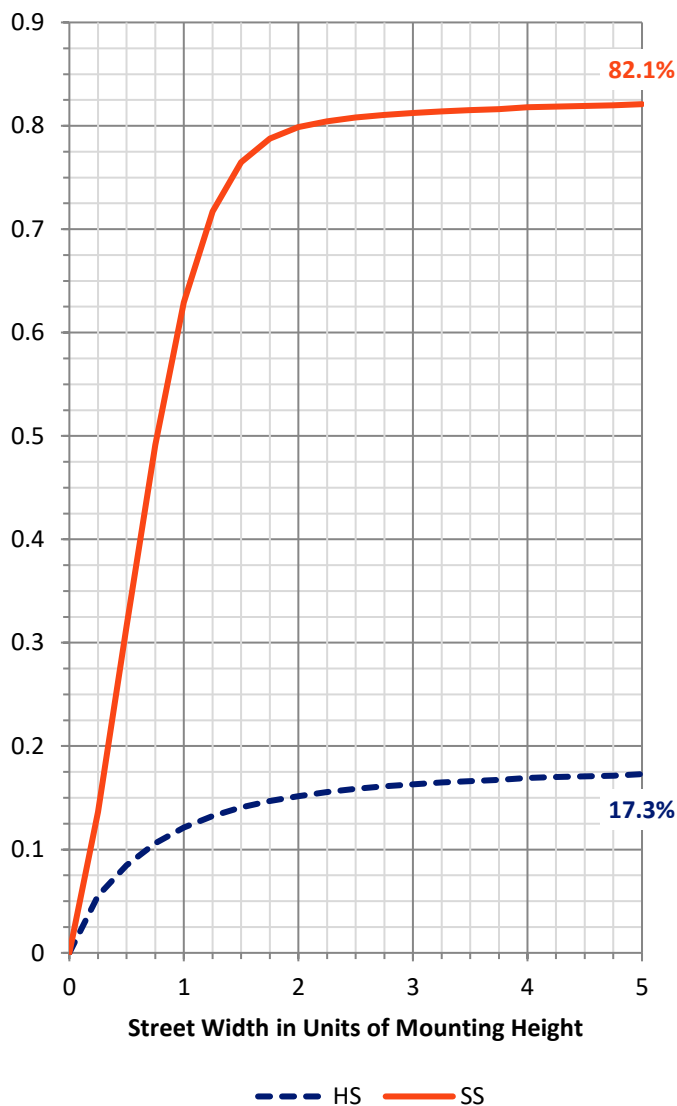
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1895.0	0.0	1895.0
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	8849.1	0.0	8849.1
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	10744.0	0.0	10744.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.5	1.0
10°-20°	444.6	4.1
20°-30°	879.6	8.2
30°-40°	1466.1	13.6
40°-50°	2163.4	20.1
50°-60°	2600.6	24.2
60°-70°	2021.2	18.8
70°-80°	894.1	8.3
80°-90°	161.9	1.5
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°	10744.0	100.0
0°-180°	10744.0	100.0

**Coefficient of Utilization**

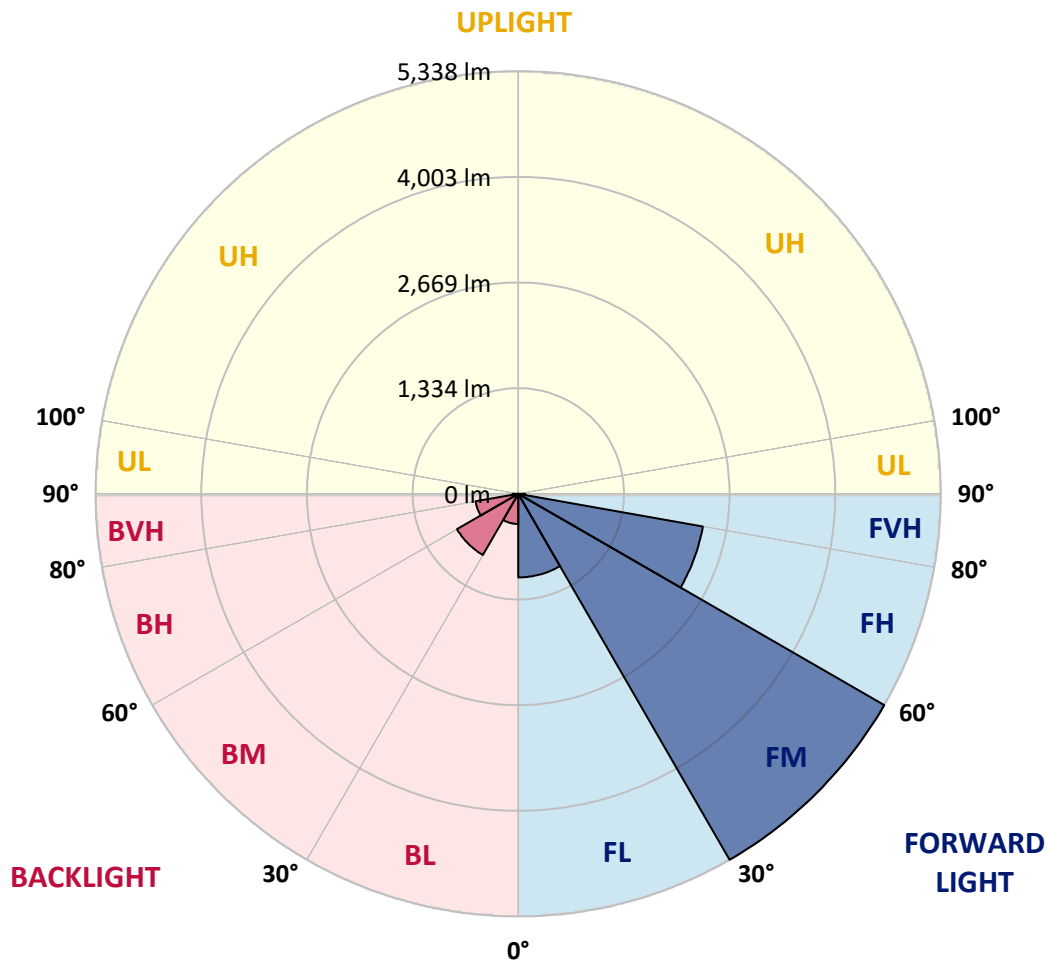


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1055.3	9.8			
FM (30°-60°)	5337.6	49.7			
FH (60°-80°)	2367.1	22.0			G2/5000
FVH (80°-90°)	89.0	0.8			G1/100
BL (0°-30°)	381.3	3.5	B1/500		
BM (30°-60°)	892.5	8.3	B1/1000		
BH (60°-80°)	548.2	5.1	B2/1000		G2/1000
BVH (80°-90°)	72.9	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5
2.5°	1197.5	1162.7	1162.7	1125.0	1127.9	1096.0	1061.2	1026.4	988.7	959.7	945.2
5°	1565.7	1539.6	1530.9	1487.4	1417.8	1339.5	1255.5	1168.5	1078.6	1009.0	974.2
7.5°	1910.7	1890.4	1878.8	1829.5	1733.9	1649.8	1516.4	1356.9	1203.3	1072.8	1020.6
10°	2165.9	2151.4	2128.2	2105.0	2035.4	1962.9	1797.7	1571.5	1345.3	1151.1	1072.8
12.5°	2351.4	2331.2	2331.2	2328.3	2281.9	2215.2	2061.5	1817.9	1510.6	1238.1	1130.8
15°	2476.1	2473.2	2481.9	2499.3	2487.7	2444.2	2290.6	2044.1	1678.8	1336.6	1197.5
17.5°	2568.9	2557.3	2574.7	2621.1	2655.9	2638.5	2510.9	2261.6	1864.3	1443.9	1270.0
20°	2670.4	2647.2	2670.4	2728.4	2771.9	2798.0	2737.1	2470.3	2064.4	1559.9	1339.5
22.5°	2864.6	2861.7	2850.2	2867.5	2896.5	2942.9	2908.1	2682.0	2258.7	1675.9	1420.7
25°	3212.6	3180.7	3148.8	3111.1	3079.2	3093.7	3064.7	2879.1	2435.5	1803.5	1490.3
27.5°	3601.1	3566.3	3508.3	3415.5	3328.6	3276.4	3215.5	3050.2	2606.6	1919.4	1557.0
30°	3957.7	3946.1	3859.2	3757.7	3606.9	3511.2	3395.2	3247.4	2812.5	2047.0	1626.6
32.5°	4291.2	4268.0	4181.0	4073.7	3896.8	3789.6	3630.1	3461.9	3047.3	2203.6	1699.1
35°	4578.2	4555.0	4453.5	4317.3	4163.6	4070.8	3888.2	3653.3	3261.9	2339.8	1760.0
37.5°	4795.7	4769.6	4673.9	4540.5	4404.3	4360.8	4204.2	3896.8	3505.4	2510.9	1835.3
40°	4917.5	4885.6	4821.8	4729.0	4615.9	4595.6	4528.9	4198.4	3812.8	2719.7	1945.5
42.5°	4931.9	4903.0	4868.2	4859.5	4850.8	4868.2	4900.1	4540.5	4163.6	2998.0	2107.9
45°	4804.4	4787.0	4789.9	4888.5	5024.7	5184.2	5375.6	5045.0	4636.2	3528.6	2473.2
47.5°	4531.8	4523.1	4586.9	4752.2	5056.6	5419.1	5961.3	5909.1	5755.4	4384.0	2942.9
50°	4091.1	4076.6	4212.9	4473.8	4908.8	5497.3	6355.6	6926.8	7054.3	5047.9	3250.3
52.5°	3459.0	3476.4	3688.1	4044.7	4569.5	5413.3	6517.9	7344.3	7680.6	5537.9	3485.1
55°	2812.5	2786.4	2977.7	3418.4	4067.9	5105.9	6549.8	7584.9	8086.5	5990.2	3714.2
57.5°	2049.9	2113.7	2316.7	2716.8	3421.3	4549.2	6364.3	7750.2	8631.6	6442.6	3925.8
60°	1388.8	1388.8	1568.6	1968.7	2644.3	3873.7	5868.5	7689.3	9107.1	6796.3	3972.2
62.5°	884.3	875.6	1020.6	1304.7	1893.3	3009.6	5126.2	7306.6	9275.3	6880.4	3778.0
65°	559.6	571.2	623.4	797.3	1212.0	2136.9	4114.3	6544.0	8999.9	6686.1	3438.7
67.5°	449.4	452.3	478.4	550.9	745.2	1371.4	3050.2	5491.5	8341.7	6196.1	3041.5
70°	397.2	403.0	408.8	434.9	510.3	866.9	2003.5	4421.6	7263.1	5343.7	2615.3
72.5°	362.4	368.2	374.0	379.8	420.4	565.4	1183.0	3351.8	5859.8	4105.6	1994.8
75°	333.4	339.2	339.2	342.1	365.3	420.4	649.5	2310.9	4079.5	2554.4	1243.9
77.5°	298.6	301.5	301.5	307.3	330.5	330.5	403.0	1429.4	2264.5	1156.9	629.2
80°	252.3	258.1	258.1	266.7	289.9	255.2	269.6	730.7	939.4	475.5	281.2
82.5°	185.6	197.2	203.0	217.5	232.0	194.3	194.3	368.2	397.2	211.7	150.8
85°	101.5	104.4	150.8	162.4	171.1	116.0	130.5	182.7	197.2	92.8	75.4
87.5°	29.0	31.9	72.5	89.9	81.2	49.3	55.1	69.6	69.6	26.1	20.3
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5
2.5°	933.6	910.4	890.1	875.6	861.1	852.4	849.5	843.7	843.7	846.6
5°	945.2	904.6	872.7	855.3	843.7	837.9	835.0	835.0	837.9	837.9
7.5°	974.2	913.3	884.3	869.8	858.2	852.4	852.4	849.5	852.4	852.4
10°	1014.8	939.4	907.5	890.1	881.4	872.7	869.8	866.9	866.9	866.9
12.5°	1058.3	968.4	933.6	913.3	898.8	887.2	881.4	875.6	872.7	872.7
15°	1098.9	997.4	951.0	927.8	907.5	890.1	878.5	869.8	866.9	866.9
17.5°	1142.4	1017.7	962.6	930.7	904.6	881.4	866.9	855.3	849.5	849.5
20°	1188.8	1032.2	962.6	922.0	887.2	864.0	846.6	835.0	823.4	823.4
22.5°	1226.5	1038.0	951.0	901.7	866.9	837.9	820.5	806.0	797.3	797.3
25°	1258.4	1032.2	924.9	869.8	829.2	803.1	785.7	774.2	765.5	765.5
27.5°	1278.7	1009.0	893.0	835.0	797.3	771.3	759.7	748.1	742.3	742.3
30°	1290.3	980.0	852.4	797.3	759.7	745.2	739.4	727.8	719.1	716.2
32.5°	1296.1	936.5	811.8	759.7	733.6	727.8	727.8	713.3	701.7	698.8
35°	1290.3	890.1	771.3	727.8	719.1	722.0	716.2	698.8	684.3	678.5
37.5°	1281.6	835.0	727.8	704.6	713.3	719.1	701.7	678.5	655.3	649.5
40°	1275.8	785.7	693.0	681.4	707.5	710.4	678.5	635.0	617.6	611.8
42.5°	1304.7	736.5	661.1	664.0	693.0	695.9	637.9	617.6	606.0	603.1
45°	1403.3	693.0	635.0	652.4	675.6	664.0	617.6	614.7	606.0	603.1
47.5°	1478.7	661.1	623.4	643.7	661.1	620.5	614.7	611.8	603.1	600.2
50°	1504.8	640.8	620.5	637.9	640.8	600.2	608.9	608.9	600.2	597.3
52.5°	1507.7	629.2	626.3	635.0	608.9	591.5	603.1	603.1	594.4	591.5
55°	1519.3	623.4	629.2	635.0	574.1	579.9	591.5	594.4	585.7	582.8
57.5°	1496.1	614.7	635.0	637.9	559.6	568.3	579.9	579.9	579.9	579.9
60°	1406.2	597.3	632.1	632.1	548.0	553.8	565.4	571.2	574.1	574.1
62.5°	1241.0	562.5	614.7	614.7	536.4	542.2	556.7	556.7	565.4	565.4
65°	1032.2	513.2	579.9	577.0	524.8	530.6	548.0	542.2	556.7	559.6
67.5°	861.1	452.3	527.7	533.5	513.2	527.7	539.3	519.0	548.0	548.0
70°	687.2	379.8	458.1	484.2	492.9	530.6	521.9	490.0	527.7	519.0
72.5°	533.5	321.8	376.9	423.3	469.7	527.7	484.2	449.4	472.6	458.1
75°	388.5	266.7	310.2	350.8	437.8	519.0	446.5	394.3	394.3	388.5
77.5°	272.5	217.5	249.4	278.3	405.9	495.8	400.1	339.2	324.7	321.8
80°	185.6	171.1	197.2	214.6	359.5	449.4	345.0	281.2	255.2	249.4
82.5°	121.8	121.8	133.4	145.0	278.3	374.0	269.6	208.8	269.6	258.1
85°	69.6	72.5	72.5	84.1	153.7	263.8	191.4	208.8	124.7	116.0
87.5°	23.2	23.2	23.2	23.2	31.9	107.3	81.2	75.4	29.0	26.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)