

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: P573491

Luminaire Tested: **ARCH-S-PA2-80-750-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573491  
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-PA2-80-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11875 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

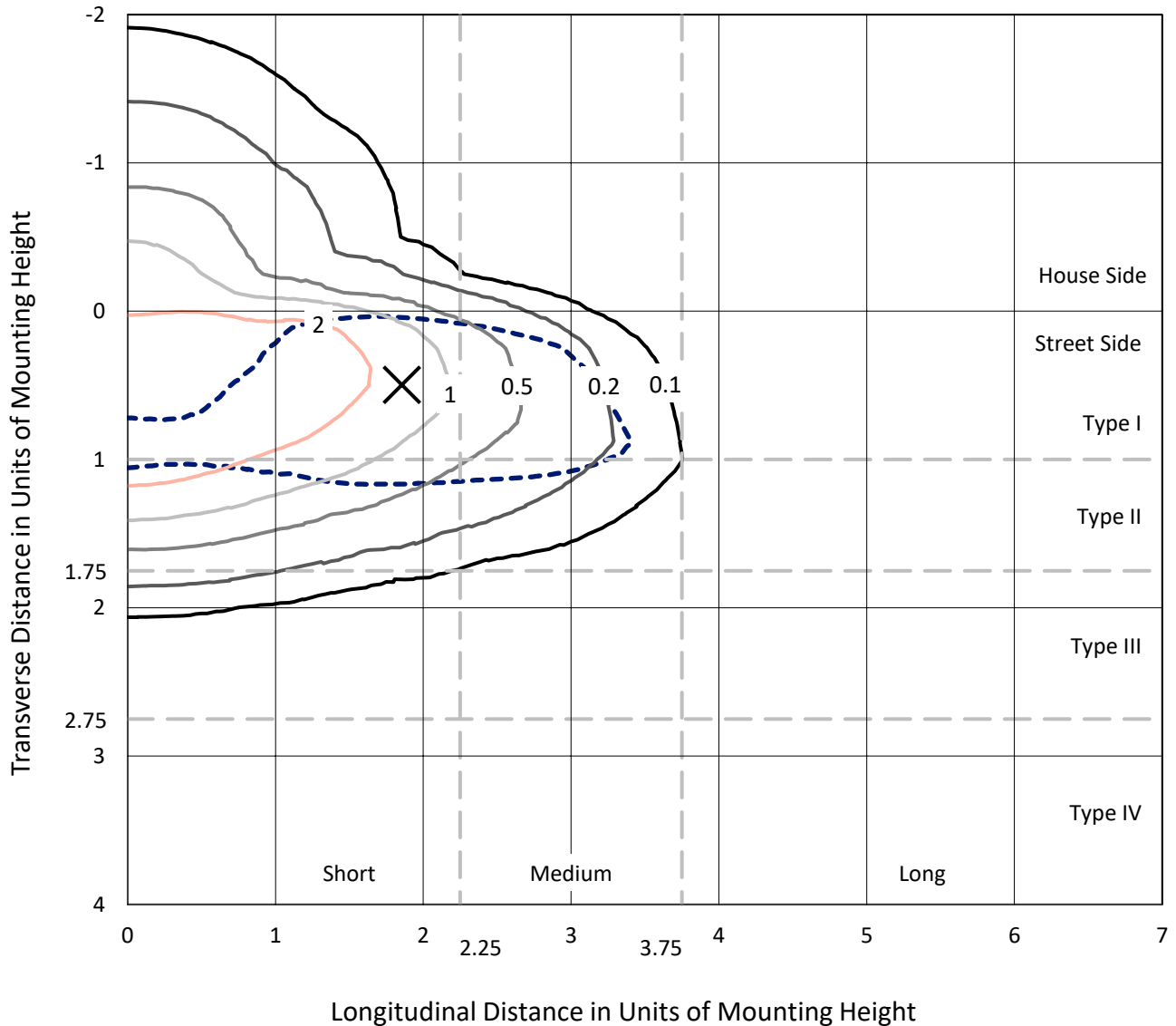
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

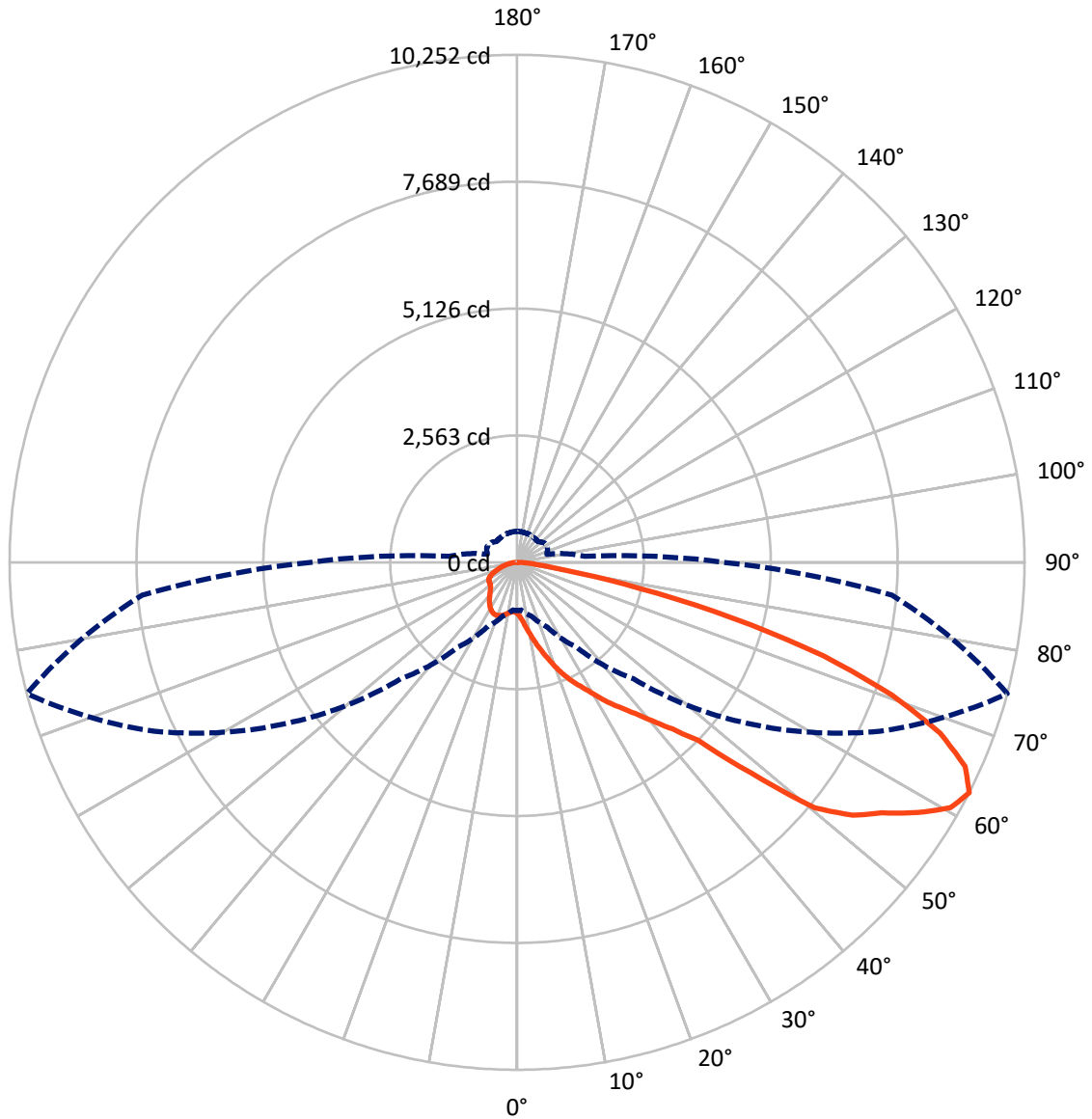
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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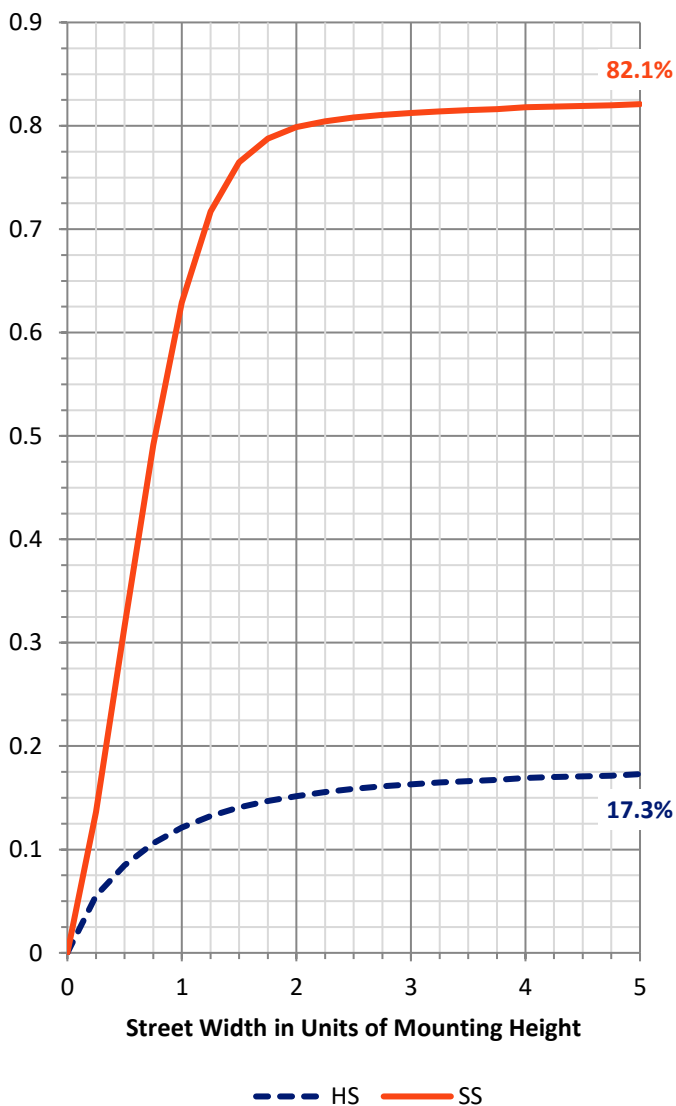
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2094.4	0.0	2094.4
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	9780.6	0.0	9780.6
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	11875.0	0.0	11875.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.3	1.0
10°-20°	491.4	4.1
20°-30°	972.1	8.2
30°-40°	1620.4	13.6
40°-50°	2391.1	20.1
50°-60°	2874.4	24.2
60°-70°	2234.0	18.8
70°-80°	988.3	8.3
80°-90°	178.9	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°	11875.0	100.0
0°-180°	11875.0	100.0

**Coefficient of Utilization**

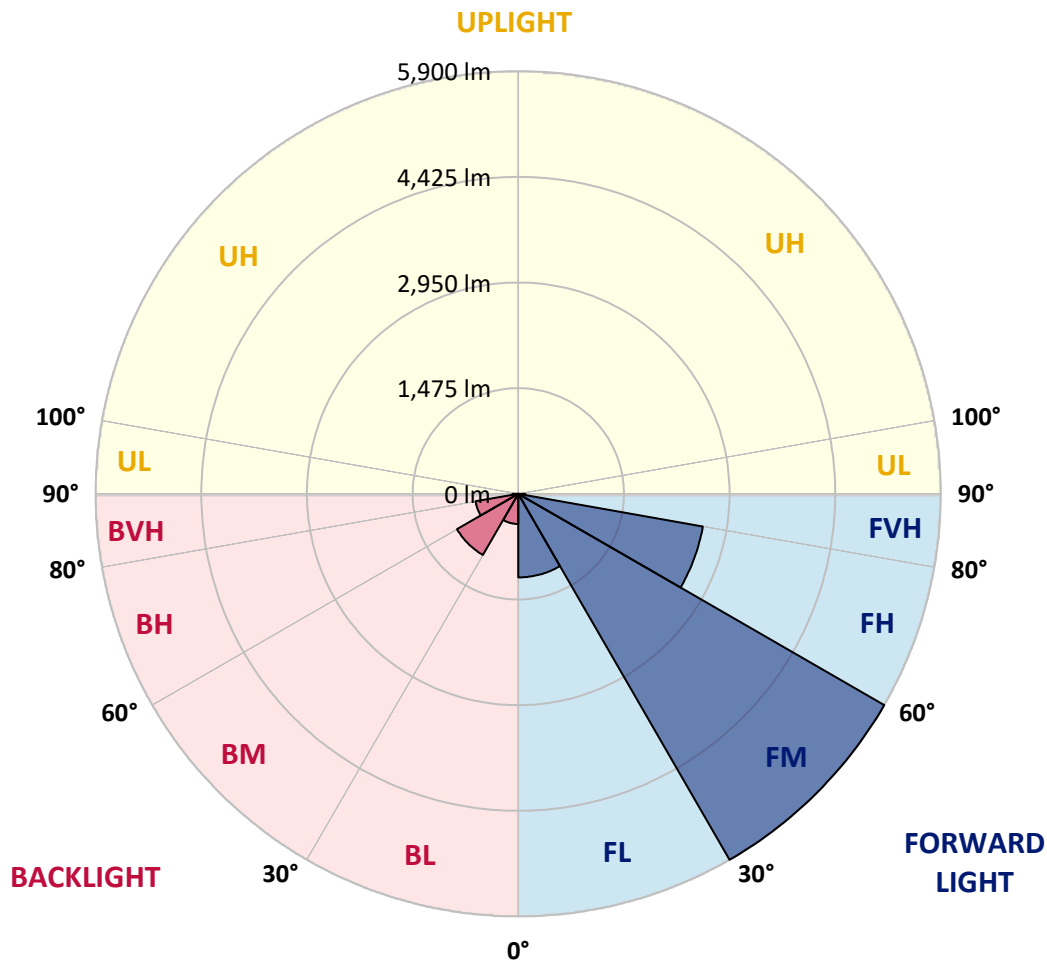


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1166.4	9.8			
FM (30°-60°)	5899.5	49.7			
FH (60°-80°)	2616.3	22.0			G2/5000
FVH (80°-90°)	98.3	0.8			G1/100
BL (0°-30°)	421.4	3.5	B1/500		
BM (30°-60°)	986.4	8.3	B1/1000		
BH (60°-80°)	606.0	5.1	B2/1000		G2/1000
BVH (80°-90°)	80.6	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°	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1
2.5°	1323.5	1285.1	1285.1	1243.4	1246.6	1211.4	1172.9	1134.4	1092.8	1060.7	1044.7
5°	1730.5	1701.7	1692.1	1644.0	1567.1	1480.6	1387.6	1291.5	1192.1	1115.2	1076.8
7.5°	2111.9	2089.4	2076.6	2022.1	1916.4	1823.5	1676.0	1499.8	1329.9	1185.7	1128.0
10°	2393.9	2377.9	2352.2	2326.6	2249.7	2169.6	1986.9	1736.9	1487.0	1272.2	1185.7
12.5°	2599.0	2576.5	2576.5	2573.3	2522.1	2448.4	2278.5	2009.3	1669.6	1368.4	1249.8
15°	2736.8	2733.6	2743.2	2762.4	2749.6	2701.5	2531.7	2259.3	1855.5	1477.3	1323.5
17.5°	2839.3	2826.5	2845.7	2897.0	2935.5	2916.2	2775.2	2499.6	2060.6	1595.9	1403.6
20°	2951.5	2925.9	2951.5	3015.6	3063.7	3092.5	3025.2	2730.4	2281.7	1724.1	1480.6
22.5°	3166.2	3163.0	3150.2	3169.4	3201.5	3252.7	3214.3	2964.3	2496.4	1852.3	1570.3
25°	3550.8	3515.5	3480.3	3438.6	3403.3	3419.4	3387.3	3182.2	2691.9	1993.3	1647.2
27.5°	3980.2	3941.7	3877.6	3775.1	3678.9	3621.3	3554.0	3371.3	2881.0	2121.5	1720.9
30°	4374.4	4361.5	4265.4	4153.2	3986.6	3880.8	3752.7	3589.2	3108.5	2262.5	1797.8
32.5°	4742.9	4717.3	4621.1	4502.5	4307.1	4188.5	4012.2	3826.4	3368.1	2435.5	1877.9
35°	5060.2	5034.5	4922.4	4771.7	4601.9	4499.3	4297.4	4037.9	3605.2	2586.2	1945.2
37.5°	5300.5	5271.7	5165.9	5018.5	4867.9	4819.8	4646.8	4307.1	3874.4	2775.2	2028.5
40°	5435.1	5399.9	5329.3	5226.8	5101.8	5079.4	5005.7	4640.3	4214.1	3006.0	2150.3
42.5°	5451.1	5419.1	5380.6	5371.0	5361.4	5380.6	5415.9	5018.5	4601.9	3313.6	2329.8
45°	5310.1	5290.9	5294.1	5403.1	5553.7	5729.9	5941.4	5576.1	5124.3	3900.1	2733.6
47.5°	5008.9	4999.3	5069.8	5252.4	5588.9	5989.5	6588.8	6531.1	6361.2	4845.4	3252.7
50°	4521.8	4505.8	4656.4	4944.8	5425.5	6076.0	7024.6	7655.9	7796.9	5579.3	3592.4
52.5°	3823.2	3842.4	4076.3	4470.5	5050.5	5983.1	7204.1	8117.4	8489.1	6120.9	3852.0
55°	3108.5	3079.7	3291.2	3778.3	4496.1	5643.4	7239.3	8383.4	8937.8	6620.8	4105.2
57.5°	2265.7	2336.2	2560.5	3002.8	3781.5	5028.1	7034.2	8566.1	9540.3	7120.8	4339.1
60°	1535.0	1535.0	1733.7	2176.0	2922.6	4281.4	6486.2	8498.8	10065.8	7511.7	4390.4
62.5°	977.4	967.8	1128.0	1442.1	2092.6	3326.4	5665.8	8075.7	10251.7	7604.7	4175.7
65°	618.5	631.3	689.0	881.3	1339.5	2361.8	4547.4	7232.9	9947.3	7389.9	3800.7
67.5°	496.7	499.9	528.8	608.9	823.6	1515.8	3371.3	6069.6	9219.8	6848.4	3361.7
70°	439.0	445.4	451.9	480.7	564.0	958.2	2214.4	4887.1	8027.7	5906.2	2890.6
72.5°	400.6	407.0	413.4	419.8	464.7	624.9	1307.5	3704.6	6476.6	4537.8	2204.8
75°	368.5	374.9	374.9	378.1	403.8	464.7	717.8	2554.1	4509.0	2823.3	1374.8
77.5°	330.1	333.3	333.3	339.7	365.3	365.3	445.4	1579.9	2502.8	1278.7	695.4
80°	278.8	285.2	285.2	294.8	320.5	282.0	298.0	807.6	1038.3	525.6	310.9
82.5°	205.1	217.9	224.3	240.3	256.4	214.7	214.7	407.0	439.0	233.9	166.6
85°	112.2	115.4	166.6	179.5	189.1	128.2	144.2	201.9	217.9	102.5	83.3
87.5°	32.0	35.3	80.1	99.3	89.7	54.5	60.9	76.9	76.9	28.8	22.4
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°	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1
2.5°	1031.9	1006.3	983.8	967.8	951.8	942.2	939.0	932.6	932.6	935.8
5°	1044.7	999.9	964.6	945.4	932.6	926.1	922.9	922.9	926.1	926.1
7.5°	1076.8	1009.5	977.4	961.4	948.6	942.2	942.2	939.0	942.2	942.2
10°	1121.6	1038.3	1003.1	983.8	974.2	964.6	961.4	958.2	958.2	958.2
12.5°	1169.7	1070.4	1031.9	1009.5	993.4	980.6	974.2	967.8	964.6	964.6
15°	1214.6	1102.4	1051.1	1025.5	1003.1	983.8	971.0	961.4	958.2	958.2
17.5°	1262.6	1124.8	1063.9	1028.7	999.9	974.2	958.2	945.4	939.0	939.0
20°	1313.9	1140.9	1063.9	1019.1	980.6	955.0	935.8	922.9	910.1	910.1
22.5°	1355.6	1147.3	1051.1	996.6	958.2	926.1	906.9	890.9	881.3	881.3
25°	1390.8	1140.9	1022.3	961.4	916.5	887.7	868.5	855.6	846.0	846.0
27.5°	1413.3	1115.2	987.0	922.9	881.3	852.4	839.6	826.8	820.4	820.4
30°	1426.1	1083.2	942.2	881.3	839.6	823.6	817.2	804.4	794.8	791.6
32.5°	1432.5	1035.1	897.3	839.6	810.8	804.4	804.4	788.3	775.5	772.3
35°	1426.1	983.8	852.4	804.4	794.8	798.0	791.6	772.3	756.3	749.9
37.5°	1416.5	922.9	804.4	778.7	788.3	794.8	775.5	749.9	724.3	717.8
40°	1410.1	868.5	765.9	753.1	781.9	785.1	749.9	701.8	682.6	676.2
42.5°	1442.1	814.0	730.7	733.9	765.9	769.1	705.0	682.6	669.8	666.6
45°	1551.1	765.9	701.8	721.0	746.7	733.9	682.6	679.4	669.8	666.6
47.5°	1634.4	730.7	689.0	711.4	730.7	685.8	679.4	676.2	666.6	663.4
50°	1663.2	708.2	685.8	705.0	708.2	663.4	673.0	673.0	663.4	660.2
52.5°	1666.4	695.4	692.2	701.8	673.0	653.8	666.6	666.6	657.0	653.8
55°	1679.2	689.0	695.4	701.8	634.5	640.9	653.8	657.0	647.3	644.1
57.5°	1653.6	679.4	701.8	705.0	618.5	628.1	640.9	640.9	640.9	640.9
60°	1554.3	660.2	698.6	698.6	605.7	612.1	624.9	631.3	634.5	634.5
62.5°	1371.6	621.7	679.4	679.4	592.9	599.3	615.3	615.3	624.9	624.9
65°	1140.9	567.2	640.9	637.7	580.0	586.5	605.7	599.3	615.3	618.5
67.5°	951.8	499.9	583.2	589.7	567.2	583.2	596.1	573.6	605.7	605.7
70°	759.5	419.8	506.3	535.2	544.8	586.5	576.8	541.6	583.2	573.6
72.5°	589.7	355.7	416.6	467.9	519.2	583.2	535.2	496.7	522.4	506.3
75°	429.4	294.8	342.9	387.8	483.9	573.6	493.5	435.8	435.8	429.4
77.5°	301.2	240.3	275.6	307.6	448.7	548.0	442.2	374.9	358.9	355.7
80°	205.1	189.1	217.9	237.1	397.4	496.7	381.4	310.9	282.0	275.6
82.5°	134.6	134.6	147.4	160.2	307.6	413.4	298.0	230.7	298.0	285.2
85°	76.9	80.1	80.1	92.9	169.8	291.6	211.5	230.7	137.8	128.2
87.5°	25.6	25.6	25.6	25.6	35.3	118.6	89.7	83.3	32.0	28.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)