

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: P348993

Luminaire Tested: **ARCH-N-PA1-50-740-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348993  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-740-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4857 lumens  
Efficiency: N/A  
Efficacy: 93.4 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

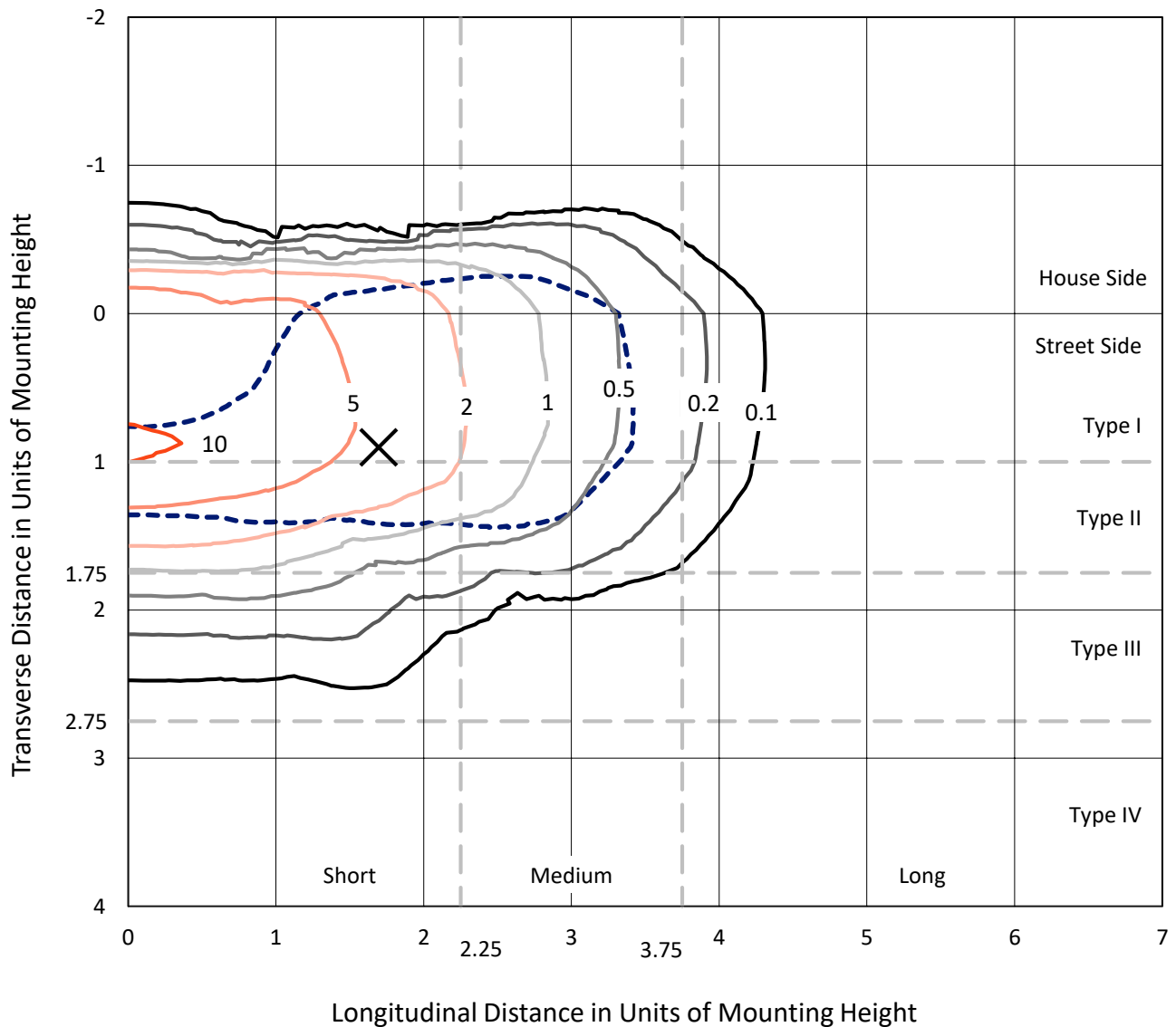
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P348993  
 CATALOG NUMBER: ARCH-N-PA1-50-740-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

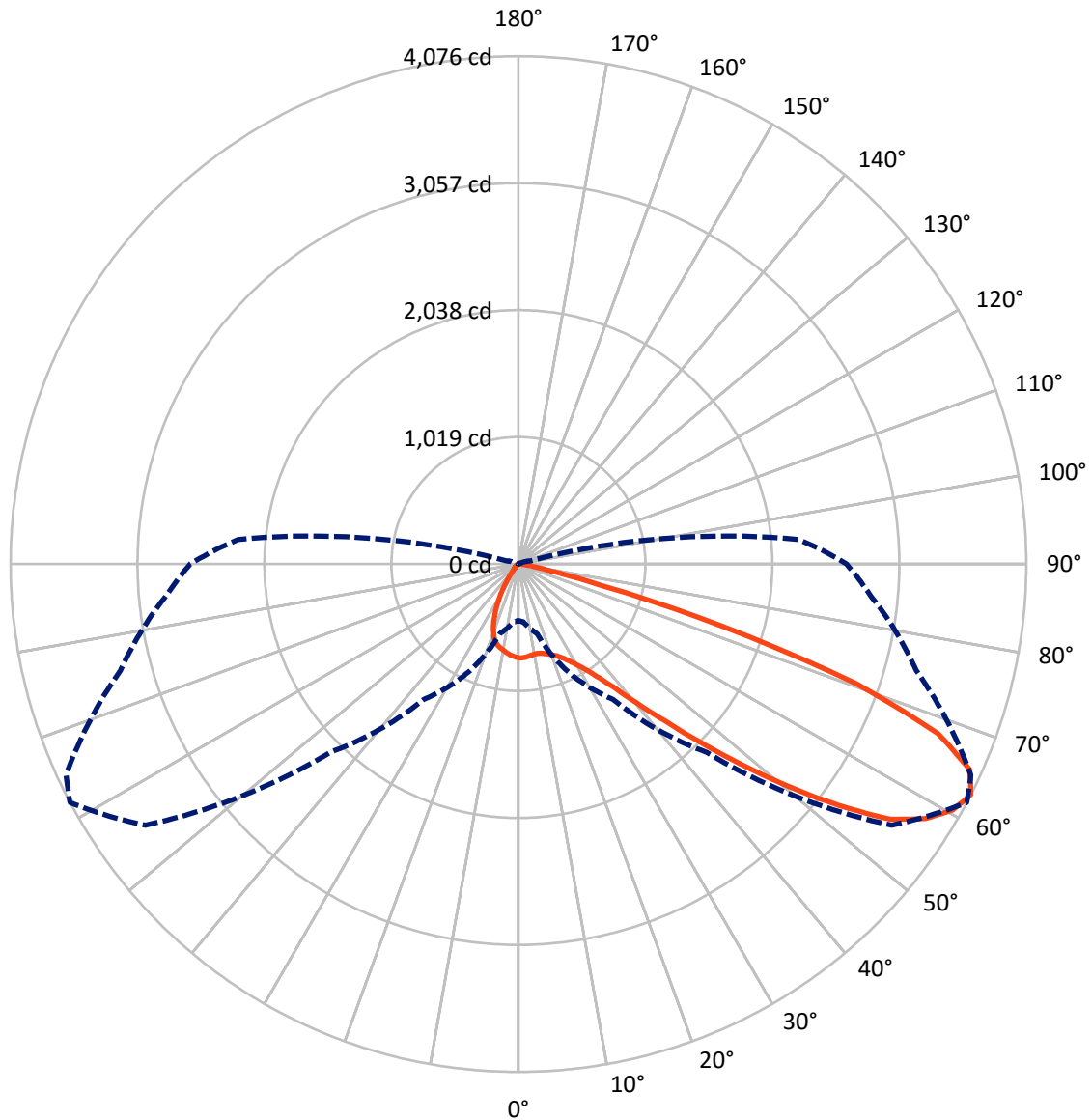
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.8 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P348993  
CATALOG NUMBER: ARCH-N-PA1-50-740-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P348993

CATALOG NUMBER: ARCH-N-PA1-50-740-U-T2U-HSS

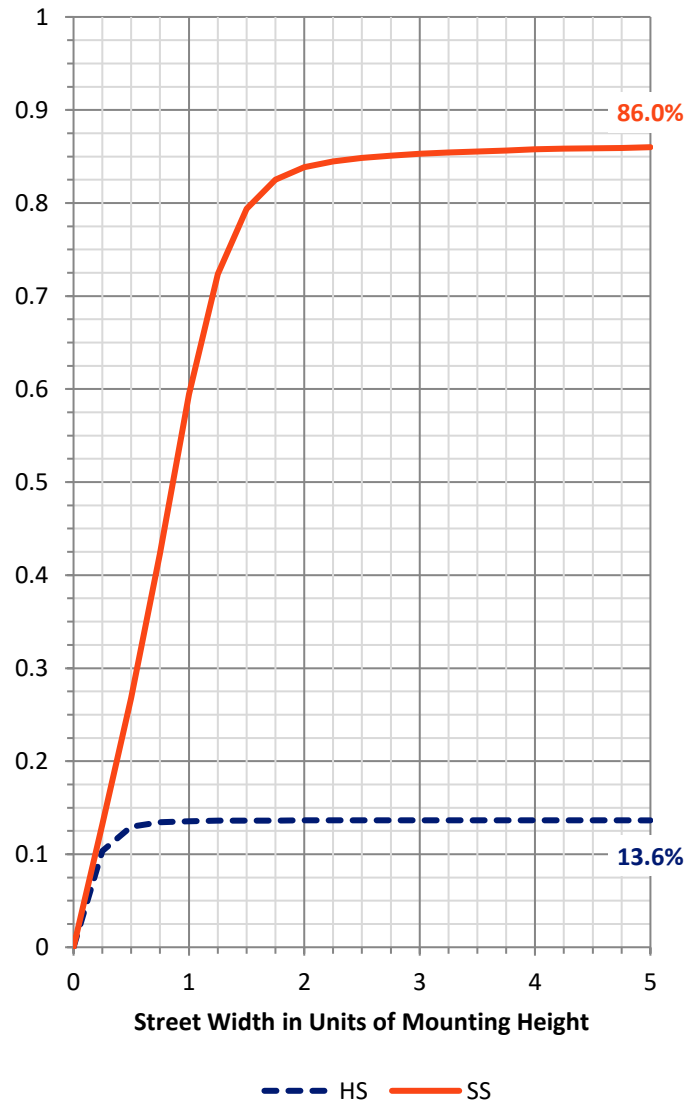
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	670.6	0.0	670.6
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	4186.4	0.0	4186.4
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	4857.0	0.0	4857.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.7	1.4
10°-20°	172.5	3.6
20°-30°	257.6	5.3
30°-40°	490.8	10.1
40°-50°	1023.4	21.1
50°-60°	1359.6	28.0
60°-70°	1059.9	21.8
70°-80°	400.6	8.2
80°-90°	24.0	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°	4857.0	100.0
0°-180°	4857.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P348993

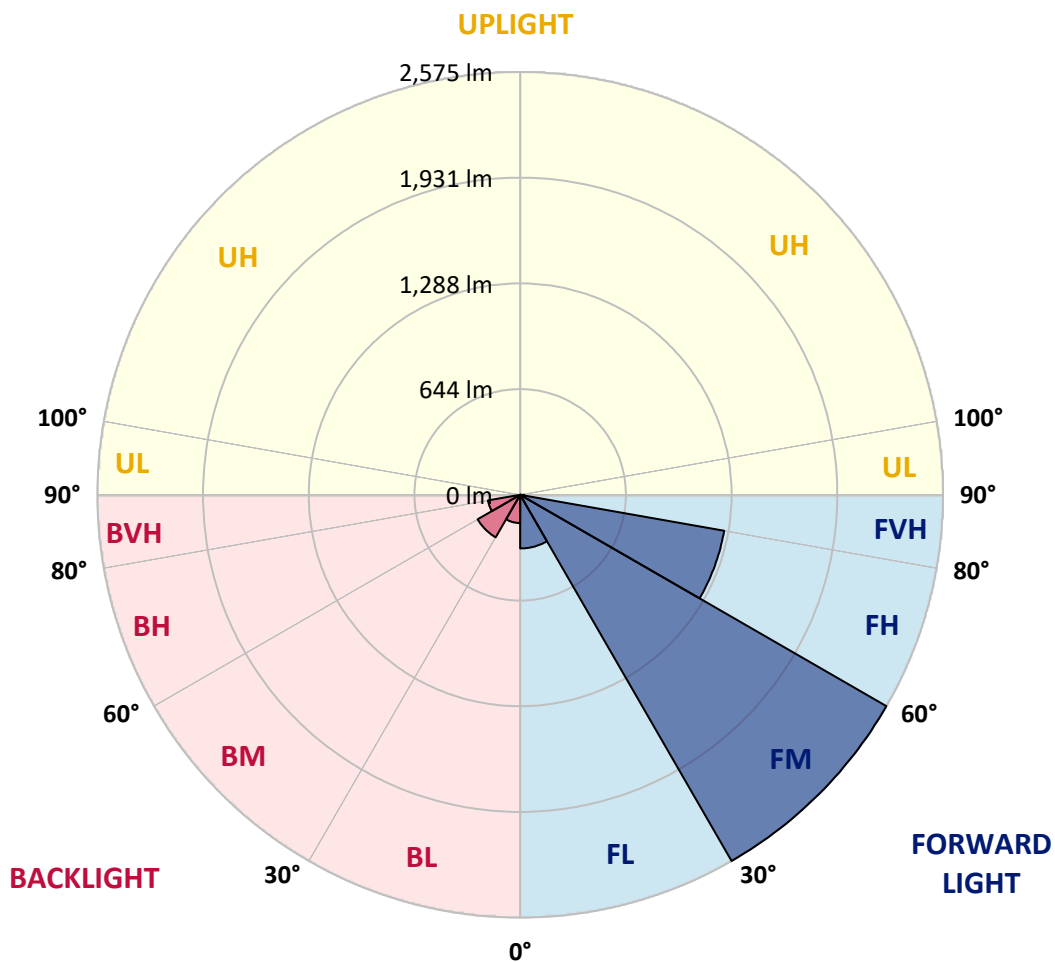
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	326.8	6.7			
FM	(30°-60°)	2575.2	53.0			
FH	(60°-80°)	1261.5	26.0			G1/1800
FVH	(80°-90°)	22.9	0.5			G1/100
BL	(0°-30°)	172.0	3.5	B1/500		
BM	(30°-60°)	298.6	6.1	B1/1000		
BH	(60°-80°)	198.9	4.1	B1/500		G1/500
BVH	(80°-90°)	1.1	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





REPORT NUMBER: P348993

CATALOG NUMBER: ARCH-N-PA1-50-740-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6
2.5°	752.0	750.8	753.9	753.9	753.3	754.6	753.3	752.7	752.0	750.8	749.5
5°	732.4	732.4	736.8	738.7	740.6	744.4	745.7	747.0	746.3	747.6	748.2
7.5°	709.5	710.8	715.9	718.4	721.6	729.2	733.6	738.7	739.3	743.8	746.3
10°	690.5	691.7	696.8	700.0	704.4	714.6	724.1	733.0	734.3	742.5	744.4
12.5°	677.8	679.1	684.1	688.6	698.1	710.8	724.1	734.3	737.4	747.6	747.6
15°	672.7	674.0	680.3	687.9	700.6	717.1	733.6	744.4	750.8	759.0	755.2
17.5°	670.8	673.3	684.1	695.6	709.5	727.3	747.6	759.0	765.4	774.2	766.0
20°	676.5	679.7	693.6	709.5	724.1	742.5	764.7	777.4	783.8	789.5	773.6
22.5°	696.8	701.9	714.0	731.7	743.2	765.4	787.6	802.2	809.2	808.5	787.6
25°	745.7	752.0	757.7	767.3	772.3	799.0	822.5	837.1	842.2	840.2	816.1
27.5°	861.2	869.4	849.1	828.2	816.8	841.5	867.5	882.8	887.2	883.4	846.6
30°	1056.0	1056.7	1010.3	944.3	895.5	892.9	924.7	945.0	945.0	937.3	889.7
32.5°	1339.7	1319.4	1261.0	1144.2	1033.8	976.1	1000.2	1019.8	1019.8	1010.3	955.8
35°	1696.4	1681.1	1584.7	1444.4	1247.7	1109.3	1104.3	1123.3	1123.9	1121.4	1059.2
37.5°	2059.4	2021.9	1941.3	1773.2	1542.1	1314.3	1253.4	1266.7	1276.2	1275.0	1197.5
40°	2397.0	2359.6	2291.6	2129.8	1903.9	1616.4	1470.4	1470.4	1471.1	1464.7	1371.4
42.5°	2662.3	2645.1	2594.4	2482.0	2307.5	2091.7	1763.0	1714.8	1704.6	1698.3	1575.8
45°	2834.3	2816.5	2789.2	2765.7	2709.2	2631.8	2155.8	2029.5	2013.0	1950.8	1801.7
47.5°	2843.8	2816.5	2834.9	2923.7	3051.3	3091.3	2640.7	2396.4	2352.6	2240.2	2028.3
50°	2631.8	2634.3	2706.1	2921.8	3266.4	3494.3	3154.7	2800.0	2730.8	2506.1	2228.2
52.5°	2242.1	2267.5	2378.6	2710.5	3276.6	3751.9	3602.2	3216.3	3079.2	2744.8	2369.1
55°	1755.4	1778.2	1959.7	2318.9	3029.7	3788.7	3927.7	3614.8	3433.3	2911.0	2495.4
57.5°	1241.3	1284.5	1509.8	1839.8	2558.8	3507.6	4016.6	3853.5	3677.7	3072.9	2614.0
60°	754.6	776.2	1010.3	1394.3	1928.6	2919.3	3912.5	4005.8	3863.6	3213.1	2725.1
62.5°	453.8	466.5	578.8	960.2	1327.0	2137.4	3654.8	4075.6	4005.8	3306.4	2831.7
65°	268.4	276.7	329.4	580.1	884.0	1311.1	3098.3	3979.8	4036.2	3387.0	2893.9
67.5°	193.6	196.1	215.1	312.2	593.4	702.5	2154.6	3630.7	3842.0	3413.7	2857.1
70°	166.9	170.1	188.5	219.6	420.1	414.4	1121.4	2873.6	3256.9	3274.7	2701.6
72.5°	126.3	132.0	162.5	206.3	301.4	294.5	422.7	1713.5	2211.0	2688.3	2329.1
75°	85.7	88.8	120.6	175.2	235.4	219.6	221.5	687.9	1081.4	1685.6	1600.5
77.5°	53.9	56.5	73.6	125.7	201.8	154.8	156.8	244.3	390.3	714.6	686.0
80°	36.8	38.1	44.4	81.2	136.4	134.5	100.9	127.6	145.3	220.2	147.9
82.5°	22.2	22.2	29.2	48.2	82.5	106.6	63.5	70.4	77.4	81.9	33.6
85°	7.6	8.3	17.8	29.8	50.8	53.3	36.2	41.9	43.8	47.6	15.9
87.5°	3.2	2.5	9.5	16.5	21.6	24.8	20.9	19.0	20.9	27.9	7.0
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: P348993

CATALOG NUMBER: ARCH-N-PA1-50-740-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6	754.6
2.5°	750.1	747.6	747.6	747.0	743.2	741.2	739.3	734.3	737.4	733.6	731.1
5°	746.3	744.4	741.2	738.1	729.2	721.6	718.4	712.1	711.4	706.3	703.8
7.5°	745.7	741.2	736.2	725.4	712.1	700.0	689.2	678.4	674.0	668.3	665.1
10°	742.5	736.8	727.3	710.1	690.5	671.4	647.3	617.5	595.3	582.6	580.7
12.5°	743.2	736.8	722.2	696.8	670.8	628.9	564.2	496.3	440.4	417.0	413.1
15°	748.2	741.2	719.0	684.8	640.3	548.3	429.6	325.6	253.2	227.2	221.5
17.5°	754.6	742.5	712.1	667.6	582.0	425.2	270.4	170.7	130.1	115.5	113.0
20°	758.4	741.9	700.6	641.6	493.1	284.3	147.2	100.3	88.2	85.0	83.8
22.5°	767.9	743.8	691.1	601.0	381.4	171.3	93.3	78.1	71.1	67.3	66.6
25°	787.6	756.5	691.7	548.3	267.2	103.4	75.5	63.5	57.1	53.3	52.0
27.5°	816.1	779.3	703.8	483.0	165.0	78.1	62.8	51.4	44.4	41.3	40.6
30°	852.3	807.2	717.8	397.9	102.8	65.4	50.8	40.0	34.9	33.0	32.4
32.5°	909.4	855.5	729.8	297.6	71.1	53.9	40.0	31.7	28.6	26.7	26.7
35°	1004.0	938.6	749.5	199.3	56.5	43.2	32.4	26.0	23.5	22.2	22.2
37.5°	1137.3	1057.3	759.0	123.8	46.3	33.6	26.0	21.6	19.7	18.4	18.4
40°	1299.7	1201.4	745.7	76.8	38.7	27.3	21.6	18.4	16.5	15.9	15.9
42.5°	1486.9	1367.0	703.8	54.6	32.4	22.2	18.4	15.9	14.6	14.0	14.0
45°	1696.4	1548.5	628.3	45.7	27.3	19.0	15.9	13.3	12.7	12.1	12.1
47.5°	1905.2	1732.5	530.5	39.3	22.8	15.9	13.3	11.4	10.8	10.2	10.2
50°	2087.3	1893.7	427.1	34.3	19.0	14.0	11.4	9.5	8.9	8.3	8.3
52.5°	2191.4	1989.6	330.6	28.6	16.5	12.1	8.9	7.6	7.0	6.3	6.3
55°	2303.7	2069.5	246.9	24.1	13.3	10.2	7.0	5.7	5.1	4.4	4.4
57.5°	2408.4	2141.2	183.4	19.7	11.4	7.6	5.7	4.4	3.8	3.2	3.2
60°	2510.0	2202.2	135.8	15.9	9.5	6.3	4.4	3.2	2.5	1.9	1.9
62.5°	2633.7	2258.0	99.6	12.7	8.3	4.4	3.2	1.9	1.3	0.6	0.6
65°	2725.7	2286.6	74.9	9.5	7.0	3.2	1.9	1.3	0.0	0.0	0.0
67.5°	2725.1	2231.4	54.6	7.0	5.1	2.5	1.3	0.0	0.0	0.0	0.0
70°	2597.5	2063.8	38.1	5.7	3.8	1.9	0.6	0.0	0.0	0.0	0.0
72.5°	2227.5	1632.3	24.8	3.8	3.2	1.3	0.6	0.0	0.0	0.0	0.0
75°	1503.4	828.8	14.6	3.2	2.5	1.3	0.6	0.0	0.0	0.0	0.0
77.5°	642.9	325.6	7.6	1.9	1.9	0.6	0.0	0.0	0.0	0.0	0.0
80°	134.5	78.7	3.2	1.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	22.8	11.4	1.3	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.7	3.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	0.6	0.6	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)