

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: P265973

Luminaire Tested: **ARCH-AF24-80-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-80-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5707.3 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - 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: 28.75 FT

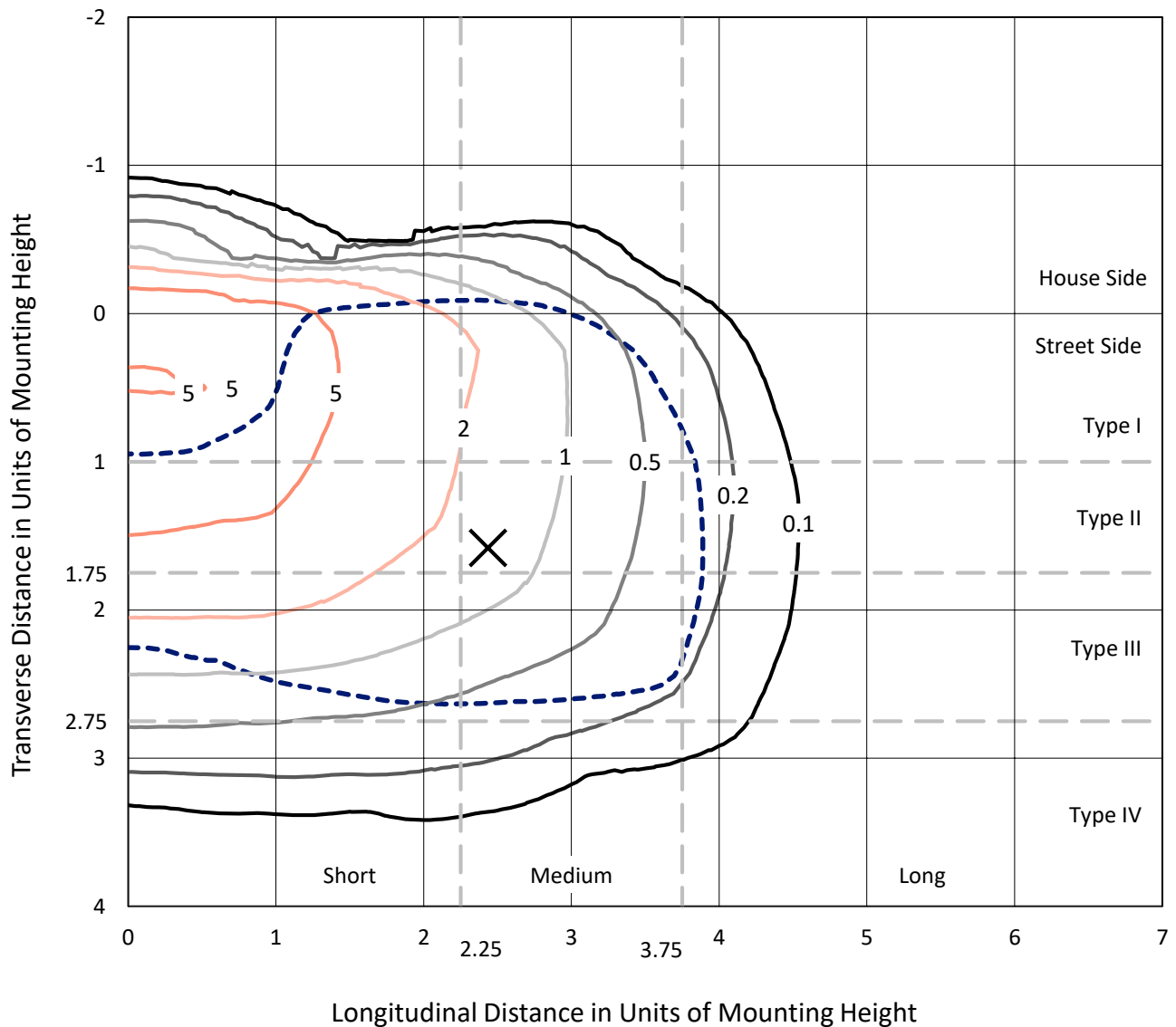


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

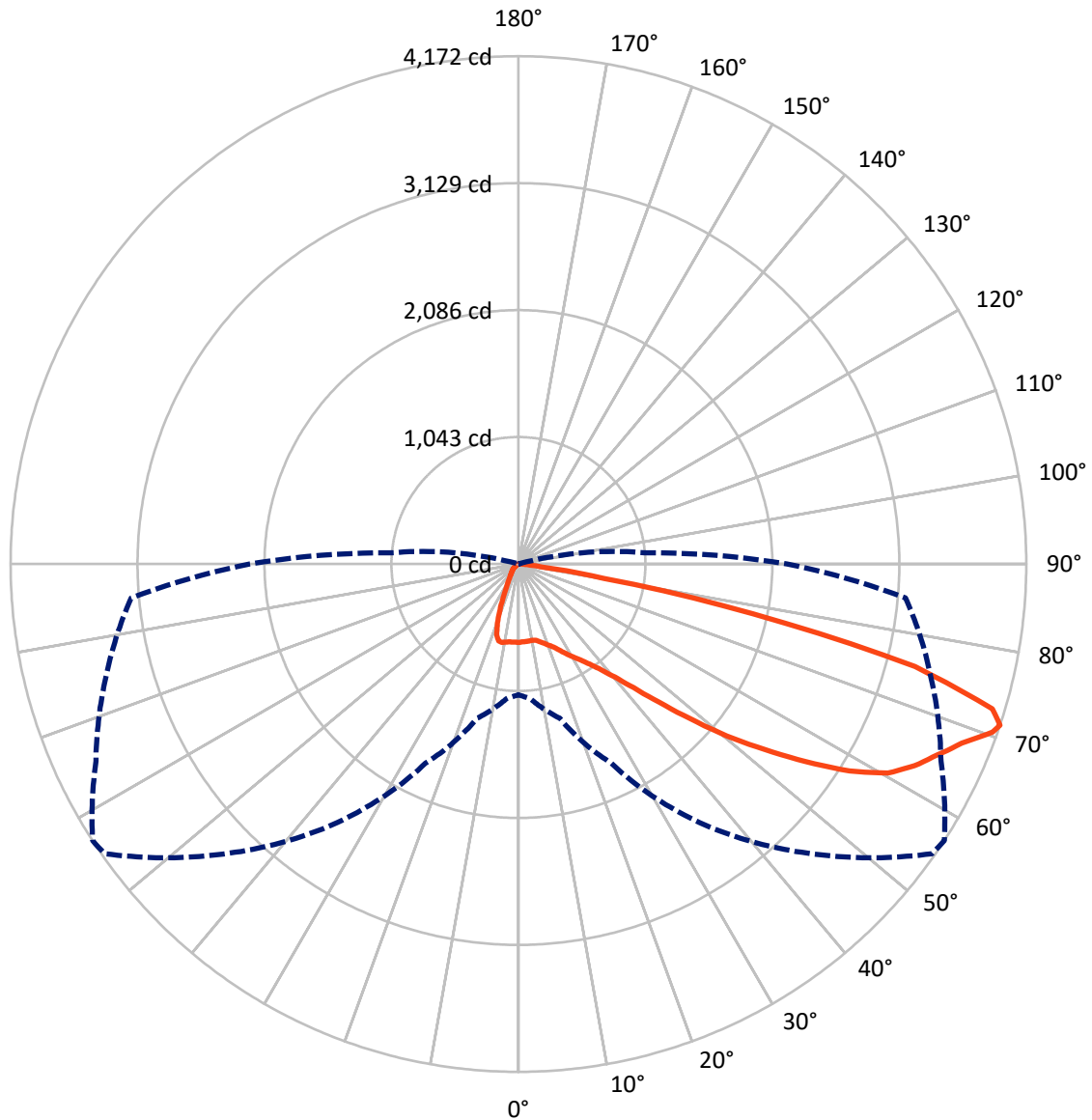


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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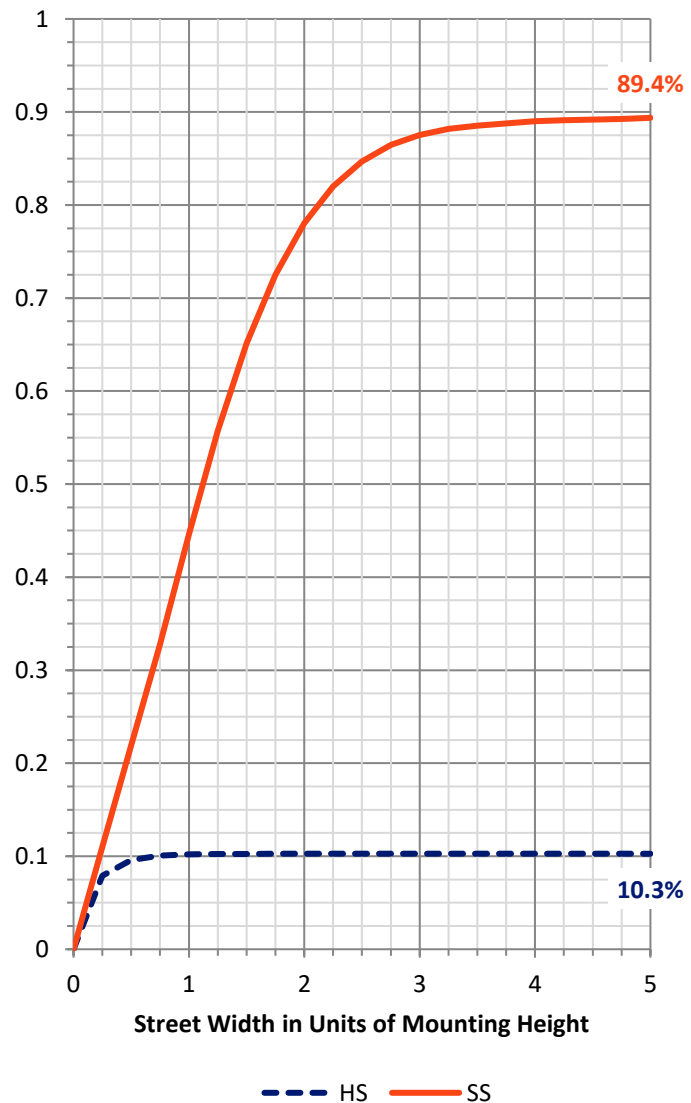
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	591.4	0.0	591.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5115.8	0.0	5115.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	5707.3	0.0	5707.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	1.1
10°-20°	162.0	2.8
20°-30°	252.7	4.4
30°-40°	427.0	7.5
40°-50°	829.4	14.5
50°-60°	1392.9	24.4
60°-70°	1662.2	29.1
70°-80°	876.0	15.3
80°-90°	44.5	0.8
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°	5707.3	100.0
0°-180°	5707.3	100.0

Coefficient of Utilization



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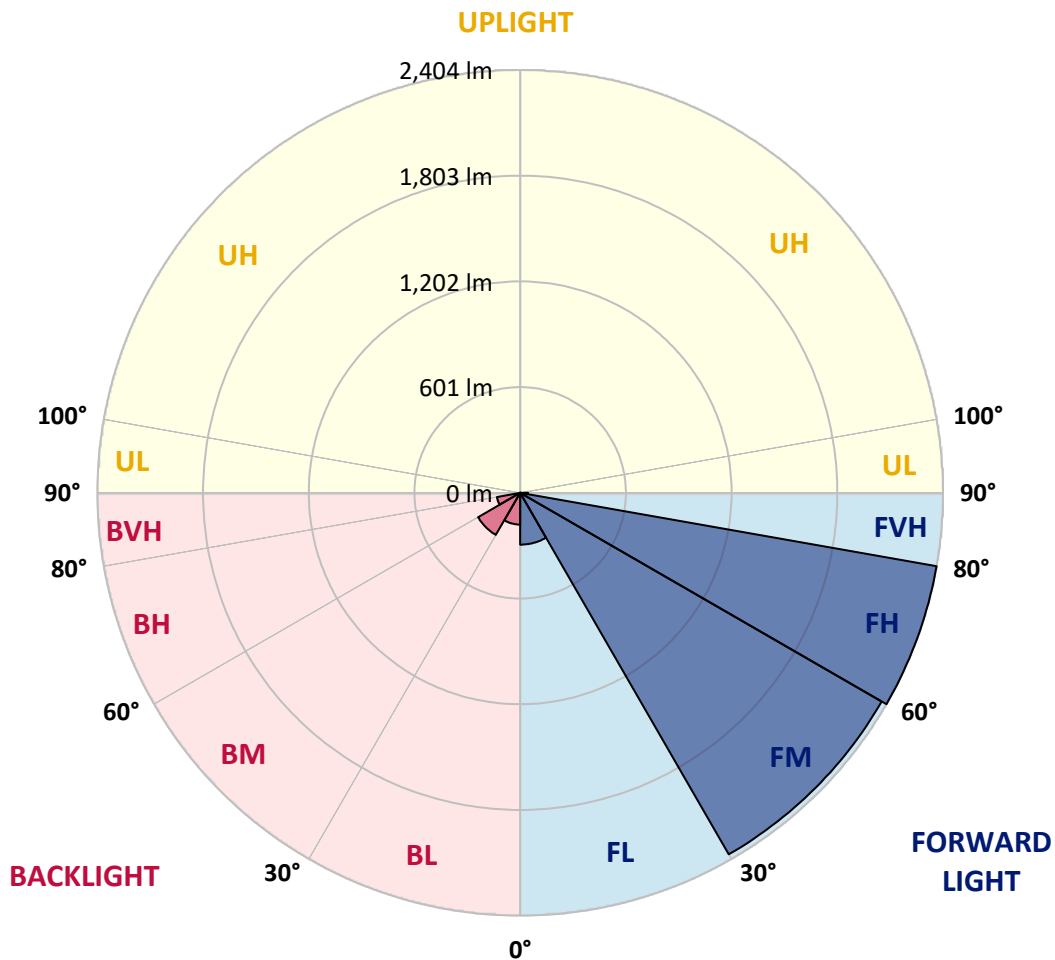
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	294.7	5.2			
FM	(30°-60°)	2373.1	41.6			
FH	(60°-80°)	2404.0	42.1			G2/5000
FVH	(80°-90°)	44.1	0.8			G1/100
BL	(0°-30°)	180.5	3.2	B1/500		
BM	(30°-60°)	276.2	4.8	B1/1000		
BH	(60°-80°)	134.3	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1
2.5°	635.7	635.7	635.7	637.1	638.3	638.3	641.0	639.8	639.8	639.8	642.4
5°	618.5	619.7	621.1	623.8	629.1	633.0	639.8	639.8	641.0	643.6	645.1
7.5°	594.5	595.8	599.8	605.1	615.8	625.1	635.7	638.3	642.4	648.9	651.7
10°	579.9	582.6	587.9	594.5	606.4	618.5	631.7	635.7	647.7	659.6	666.4
12.5°	575.9	577.3	582.6	593.2	607.8	622.3	639.8	643.6	661.0	679.6	690.3
15°	582.6	583.9	586.6	598.5	615.8	634.4	657.0	662.3	683.6	704.9	718.1
17.5°	594.5	594.5	597.2	607.8	626.4	647.7	677.0	684.9	708.9	732.7	747.4
20°	602.5	602.5	606.4	617.0	638.3	666.4	700.9	711.5	738.0	764.6	778.0
22.5°	610.5	611.7	615.8	627.7	651.7	690.3	730.1	740.7	771.4	799.3	812.5
25°	633.0	631.7	633.0	643.6	671.7	719.5	770.0	783.3	815.2	845.8	852.5
27.5°	695.6	693.0	675.5	669.0	690.3	750.1	820.5	833.8	871.0	901.7	901.7
30°	839.1	833.8	791.2	736.8	719.5	778.0	868.4	887.0	935.0	961.5	953.6
32.5°	1021.5	1009.4	954.9	861.8	792.7	815.2	919.0	940.3	1001.4	1024.1	1006.7
35°	1220.8	1219.5	1151.6	1032.1	933.6	892.3	984.2	1009.4	1086.5	1106.5	1078.5
37.5°	1432.3	1437.6	1392.5	1227.5	1111.8	1018.7	1070.6	1099.9	1194.2	1218.2	1191.6
40°	1667.8	1666.4	1649.1	1453.5	1326.0	1198.2	1195.6	1222.2	1336.6	1373.8	1336.6
42.5°	1965.6	1962.9	1900.5	1724.9	1585.2	1432.3	1377.8	1387.2	1514.8	1575.9	1521.4
45°	2268.8	2250.3	2178.4	2026.8	1903.1	1722.2	1618.6	1618.6	1727.6	1811.3	1726.3
47.5°	2437.7	2419.1	2389.9	2306.0	2268.8	2066.7	1913.7	1895.2	1980.3	2065.4	1945.6
50°	2659.8	2659.8	2586.7	2554.8	2618.6	2476.3	2239.6	2221.0	2262.2	2330.1	2173.1
52.5°	2835.4	2803.5	2751.6	2779.5	2961.7	2896.6	2565.4	2529.4	2561.4	2578.8	2371.3
55°	2908.5	2878.0	2873.9	2976.4	3258.3	3168.0	2899.2	2867.3	2864.7	2779.5	2544.1
57.5°	2923.2	2896.6	2947.1	3126.6	3546.9	3389.9	3231.7	3207.8	3133.3	2920.5	2721.1
60°	2799.5	2812.9	2935.1	3209.1	3717.1	3582.8	3512.4	3487.1	3315.6	3040.3	2917.9
62.5°	2545.4	2577.3	2806.1	3217.1	3654.7	3661.3	3667.9	3650.6	3456.5	3149.3	3116.0
65°	2245.0	2254.2	2529.4	3106.7	3545.6	3637.3	3782.4	3781.0	3564.1	3271.5	3339.4
67.5°	1849.9	1865.9	2103.9	2734.4	3327.5	3626.6	3932.6	3928.6	3686.6	3411.3	3472.4
70°	1376.5	1396.4	1589.2	2126.6	2840.7	3493.7	4129.4	4132.1	3815.6	3517.7	3380.7
71°	1073.3	1109.1	1311.3	1806.0	2592.0	3359.4	4148.1	4172.0	3830.2	3503.0	3191.8
72.5°	526.6	569.2	823.2	1271.5	2133.1	3058.8	4025.7	4072.2	3738.4	3320.9	2729.1
75°	137.0	144.9	246.0	519.9	1143.7	2026.8	3246.4	3364.7	3056.2	2528.2	1667.8
77.5°	86.4	89.1	115.7	202.2	428.2	770.0	1907.1	1965.6	1746.1	1280.8	587.9
80°	61.2	62.5	73.1	130.3	250.0	224.8	686.2	711.5	631.7	339.1	105.0
82.5°	37.2	37.2	53.2	83.8	154.2	122.3	180.9	192.9	170.1	94.4	34.6
85°	21.3	22.5	33.2	57.2	73.1	59.8	67.8	71.9	73.1	62.5	14.6
87.5°	17.2	18.7	29.3	47.9	40.0	29.3	29.3	30.6	31.9	37.2	6.6
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°	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1	645.1
2.5°	642.4	642.4	643.6	642.4	642.4	642.4	643.6	643.6	643.6	646.3	647.7
5°	645.1	645.1	645.1	643.6	642.4	642.4	645.1	646.3	646.3	650.4	650.4
7.5°	651.7	651.7	648.9	646.3	643.6	639.8	641.0	642.4	641.0	642.4	642.4
10°	666.4	666.4	662.3	657.0	648.9	637.1	621.1	601.1	582.6	575.9	573.2
12.5°	690.3	688.9	680.9	671.7	654.3	613.2	553.3	482.7	424.3	408.3	403.0
15°	716.8	714.2	704.9	688.9	642.4	533.4	408.3	317.8	261.9	248.7	246.0
17.5°	744.8	740.7	727.4	695.6	587.9	396.3	263.4	199.6	168.9	166.2	167.5
20°	774.0	768.7	750.1	682.3	474.8	264.6	170.1	154.2	151.6	151.6	152.9
22.5°	807.2	800.6	775.3	634.4	345.8	175.6	146.3	144.9	143.5	142.3	142.3
25°	845.8	837.8	799.3	548.0	238.1	143.5	139.6	135.6	132.9	130.3	128.9
27.5°	892.3	881.7	817.8	441.5	163.6	134.3	131.6	125.0	119.7	114.4	114.4
30°	938.9	925.7	812.5	332.6	132.9	125.0	119.7	111.7	103.8	98.5	97.0
32.5°	988.1	974.8	778.0	223.4	121.0	114.4	107.7	95.8	86.4	79.8	78.4
35°	1061.3	1050.7	710.2	147.6	109.1	101.1	91.7	79.8	67.8	61.2	59.8
37.5°	1170.3	1157.0	626.4	113.0	95.8	83.8	75.7	62.5	50.6	43.8	42.6
40°	1316.6	1276.8	526.6	99.7	83.8	69.2	58.5	45.3	35.9	31.9	31.9
42.5°	1486.9	1392.5	418.9	90.4	74.5	57.2	42.6	30.6	25.2	24.0	24.0
45°	1667.8	1500.2	311.3	83.8	65.1	45.3	30.6	21.3	18.7	17.2	17.2
47.5°	1853.9	1587.9	216.9	75.7	54.5	34.6	21.3	16.0	13.4	11.9	11.9
50°	2028.2	1645.2	152.9	67.8	46.5	25.2	16.0	11.9	9.3	9.3	9.3
52.5°	2149.1	1639.8	110.4	58.5	35.9	17.2	10.6	7.9	7.9	7.9	7.9
55°	2255.6	1619.9	86.4	50.6	27.9	11.9	7.9	6.6	6.6	5.3	5.3
57.5°	2346.0	1587.9	73.1	41.2	19.9	9.3	5.3	5.3	4.0	4.0	4.0
60°	2423.1	1548.0	61.2	34.6	13.4	6.6	4.0	2.6	2.6	1.3	2.6
62.5°	2528.2	1522.7	53.2	26.6	9.3	4.0	2.6	1.3	1.3	0.0	0.0
65°	2605.4	1474.8	45.3	18.7	5.3	2.6	1.3	1.3	0.0	0.0	0.0
67.5°	2608.0	1388.4	33.2	10.6	4.0	2.6	1.3	0.0	0.0	0.0	0.0
70°	2397.8	1183.6	21.3	5.3	2.6	1.3	1.3	0.0	0.0	0.0	0.0
71°	2205.0	1048.1	17.2	4.0	2.6	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1816.7	770.0	13.4	4.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0
75°	1001.4	279.4	6.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	320.5	85.1	4.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.5	13.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.7	5.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	1.3	0.0	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)