

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: P214796

Luminaire Tested: **ARCH-AF16-60-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214796
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-AF16-60-D-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4925.5 lumens
Efficiency: N/A
Efficacy: 78.2 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

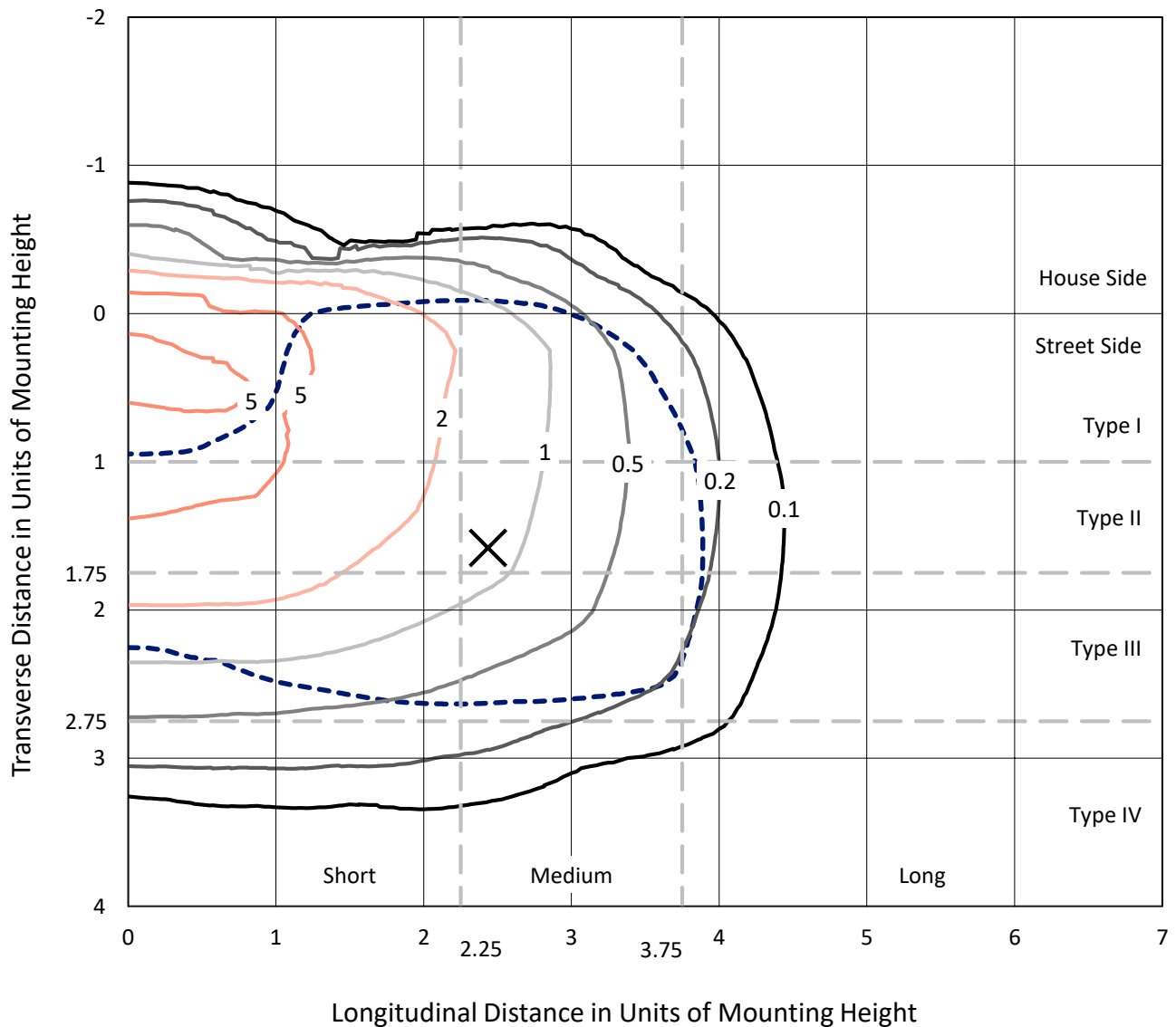
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

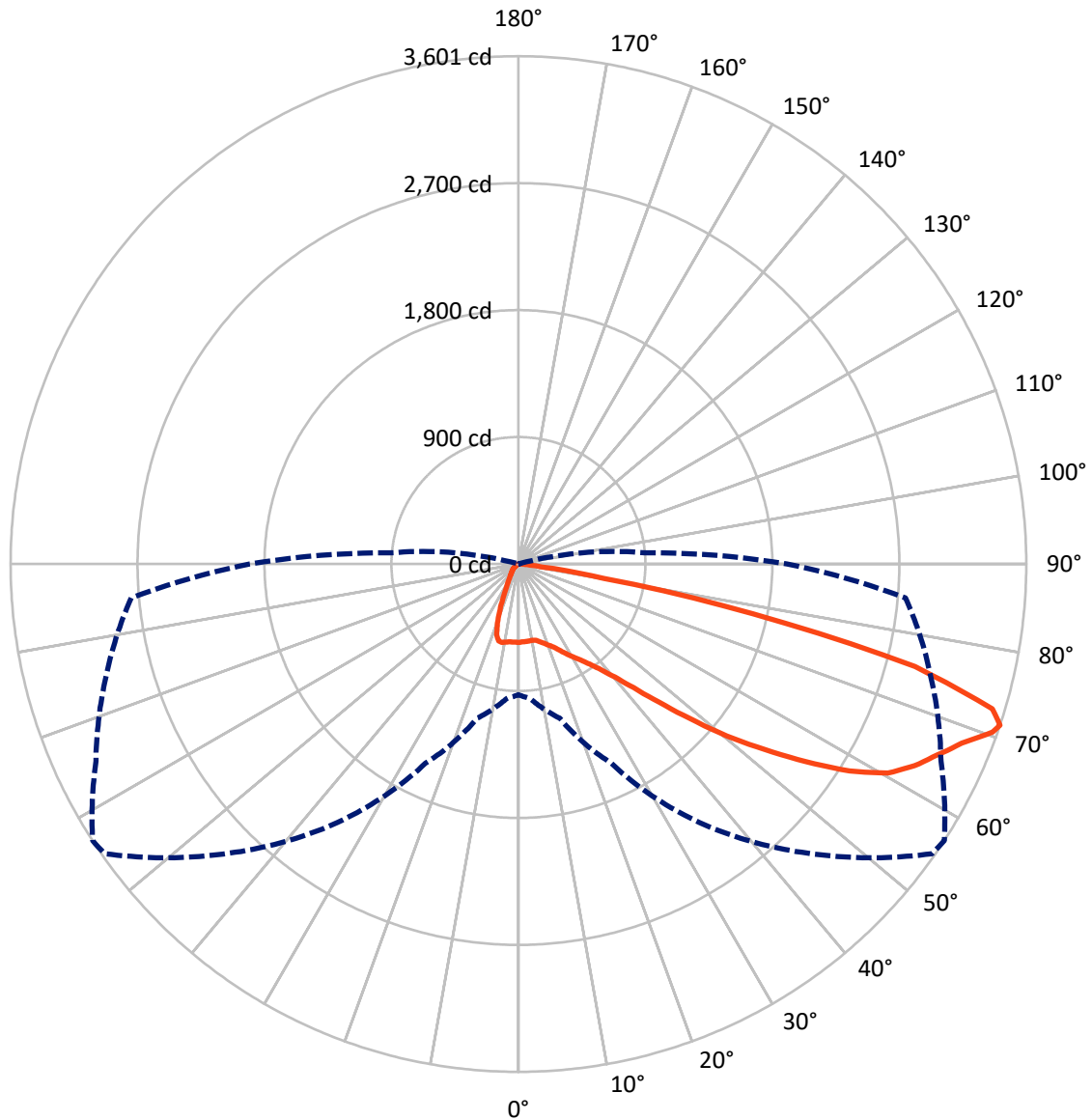


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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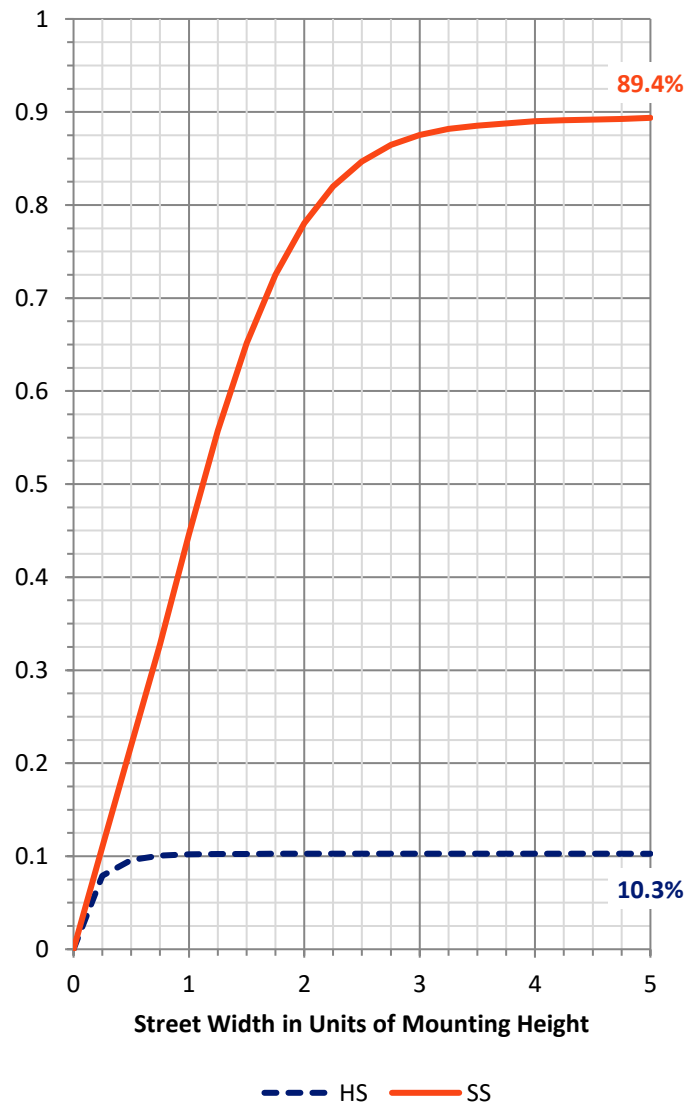
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	510.4	0.0	510.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4415.1	0.0	4415.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	4925.5	0.0	4925.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.1
10°-20°	139.8	2.8
20°-30°	218.1	4.4
30°-40°	368.5	7.5
40°-50°	715.8	14.5
50°-60°	1202.1	24.4
60°-70°	1434.5	29.1
70°-80°	756.0	15.3
80°-90°	38.4	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°	4925.5	100.0
0°-180°	4925.5	100.0



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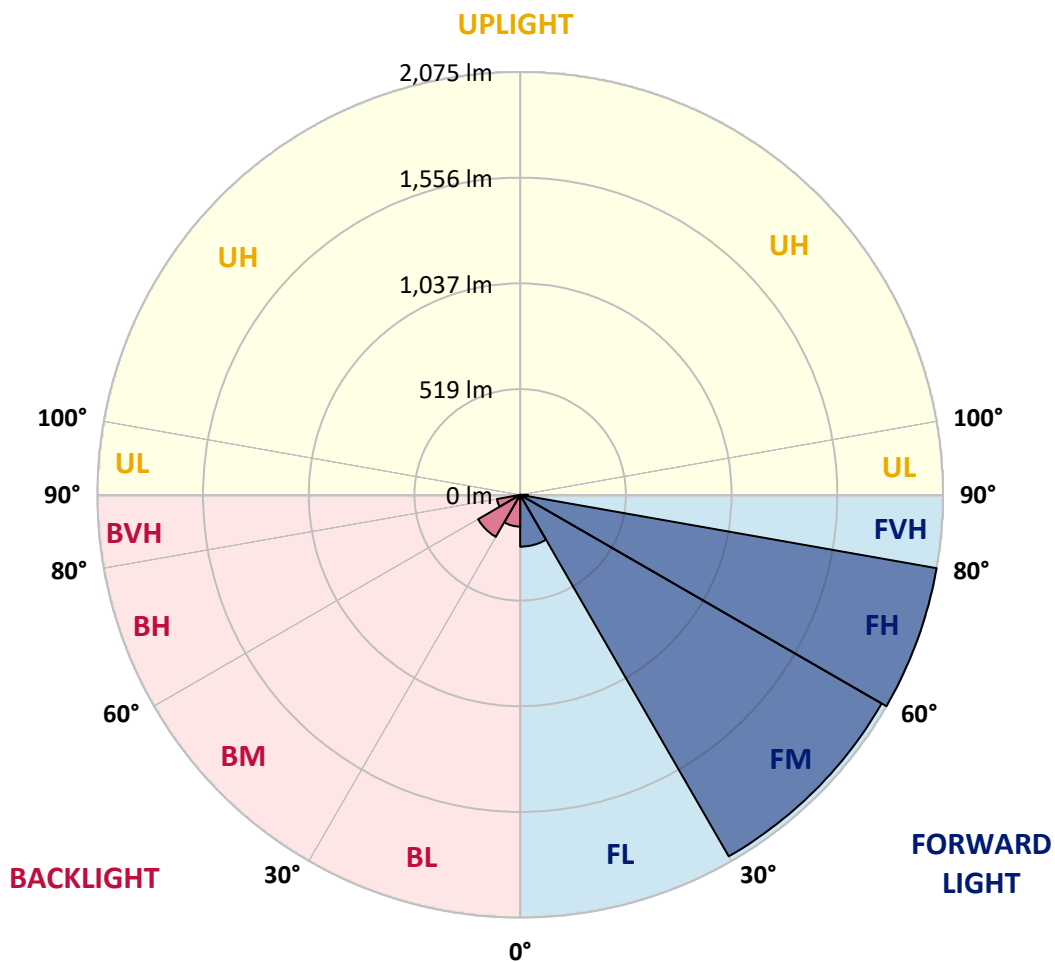
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	254.3	5.2			
FM	(30°-60°)	2048.1	41.6			
FH	(60°-80°)	2074.7	42.1			G2/5000
FVH	(80°-90°)	38.0	0.8			G1/100
BL	(0°-30°)	155.8	3.2	B1/500		
BM	(30°-60°)	238.3	4.8	B1/1000		
BH	(60°-80°)	115.9	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°	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7
2.5°	548.6	548.6	548.6	549.7	551.0	551.0	553.2	552.1	552.1	552.1	554.3
5°	533.7	534.9	536.0	538.3	542.9	546.4	552.1	552.1	553.2	555.5	556.7
7.5°	513.0	514.2	517.6	522.2	531.4	539.4	548.6	551.0	554.3	560.1	562.4
10°	500.4	502.7	507.3	513.0	523.3	533.7	545.1	548.6	558.9	569.3	575.0
12.5°	496.9	498.1	502.7	511.9	524.6	537.2	552.1	555.5	570.4	586.5	595.7
15°	502.7	503.9	506.2	516.5	531.4	547.5	567.0	571.6	589.9	608.3	619.8
17.5°	513.0	513.0	515.4	524.6	540.6	558.9	584.2	591.1	611.7	632.4	645.1
20°	520.0	520.0	523.3	532.5	551.0	575.0	604.9	614.1	637.0	659.9	671.5
22.5°	526.8	527.9	531.4	541.8	562.4	595.7	630.1	639.3	665.7	689.8	701.2
25°	546.4	545.1	546.4	555.5	579.6	620.9	664.5	676.1	703.6	730.0	735.7
27.5°	600.3	598.0	583.1	577.4	595.7	647.3	708.2	719.6	751.8	778.2	778.2
30°	724.2	719.6	682.9	635.9	620.9	671.5	749.5	765.6	806.9	829.8	823.0
32.5°	881.5	871.1	824.1	743.8	684.0	703.6	793.1	811.5	864.3	883.7	868.9
35°	1053.6	1052.5	993.9	890.7	805.7	770.2	849.4	871.1	937.7	954.9	930.8
37.5°	1236.1	1240.7	1201.7	1059.4	959.5	879.1	923.9	949.2	1030.7	1051.3	1028.4
40°	1439.3	1438.2	1423.2	1254.4	1144.3	1034.1	1031.9	1054.8	1153.5	1185.6	1153.5
42.5°	1696.4	1694.1	1640.1	1488.6	1368.1	1236.1	1189.1	1197.1	1307.3	1360.1	1313.1
45°	1958.0	1942.0	1880.0	1749.1	1642.4	1486.3	1396.8	1396.8	1491.0	1563.3	1489.8
47.5°	2103.8	2087.7	2062.5	1990.2	1958.0	1783.6	1651.7	1635.5	1709.0	1782.5	1679.2
50°	2295.5	2295.5	2232.4	2204.9	2259.9	2137.1	1932.8	1916.7	1952.3	2010.8	1875.4
52.5°	2447.0	2419.5	2374.7	2398.8	2556.0	2499.8	2214.0	2183.0	2210.6	2225.5	2046.4
55°	2510.1	2483.7	2480.2	2568.6	2812.0	2733.9	2502.1	2474.5	2472.3	2398.8	2195.7
57.5°	2522.7	2499.8	2543.4	2698.3	3061.1	2925.6	2789.1	2768.4	2704.1	2520.4	2348.3
60°	2416.0	2427.5	2533.0	2769.5	3208.0	3092.1	3031.2	3009.4	2861.3	2623.8	2518.2
62.5°	2196.8	2224.3	2421.7	2776.4	3154.0	3159.8	3165.5	3150.6	2983.0	2717.9	2689.1
65°	1937.4	1945.4	2183.0	2681.2	3059.9	3139.1	3264.2	3263.0	3075.9	2823.4	2882.0
67.5°	1596.5	1610.3	1815.7	2359.7	2871.6	3129.9	3393.8	3390.5	3181.6	2944.0	2996.7
70°	1188.0	1205.1	1371.6	1835.3	2451.6	3015.1	3563.8	3566.0	3292.9	3035.8	2917.6
71°	926.3	957.2	1131.7	1558.7	2237.0	2899.2	3579.8	3600.5	3305.5	3023.1	2754.6
72.5°	454.5	491.2	710.4	1097.2	1841.0	2639.8	3474.2	3514.4	3226.3	2865.9	2355.1
75°	118.3	125.1	212.4	448.8	987.0	1749.1	2801.7	2903.7	2637.5	2181.9	1439.3
77.5°	74.6	76.9	99.8	174.4	369.6	664.5	1645.8	1696.4	1507.0	1105.3	507.3
80°	52.8	53.9	63.1	112.5	215.7	194.0	592.2	614.1	545.1	292.7	90.6
82.5°	32.1	32.1	45.9	72.3	133.2	105.6	156.1	166.4	146.9	81.5	29.9
85°	18.4	19.5	28.6	49.3	63.1	51.7	58.5	62.0	63.1	53.9	12.6
87.5°	14.9	16.1	25.3	41.3	34.5	25.3	25.3	26.4	27.5	32.1	5.7
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°	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7	556.7
2.5°	554.3	554.3	555.5	554.3	554.3	554.3	555.5	555.5	555.5	557.8	558.9
5°	556.7	556.7	556.7	555.5	554.3	554.3	556.7	557.8	557.8	561.3	561.3
7.5°	562.4	562.4	560.1	557.8	555.5	552.1	553.2	554.3	553.2	554.3	554.3
10°	575.0	575.0	571.6	567.0	560.1	549.7	536.0	518.7	502.7	496.9	494.7
12.5°	595.7	594.5	587.7	579.6	564.7	529.1	477.5	416.6	366.1	352.4	347.8
15°	618.7	616.3	608.3	594.5	554.3	460.2	352.4	274.4	226.1	214.6	212.4
17.5°	642.7	639.3	627.8	600.3	507.3	342.1	227.3	172.2	145.8	143.4	144.6
20°	668.0	663.4	647.3	588.8	409.8	228.4	146.9	133.2	130.8	130.8	132.0
22.5°	696.7	690.9	669.1	547.5	298.4	151.5	126.2	125.1	124.0	122.9	122.9
25°	730.0	723.1	689.8	472.9	205.4	124.0	120.5	117.0	114.8	112.5	111.3
27.5°	770.2	761.0	705.8	381.0	141.2	115.9	113.6	107.9	103.3	98.7	98.7
30°	810.3	798.8	701.2	286.9	114.8	107.9	103.3	96.4	89.5	84.9	83.8
32.5°	852.7	841.3	671.5	192.8	104.4	98.7	93.0	82.7	74.6	68.8	67.7
35°	916.0	906.7	612.8	127.4	94.1	87.3	79.2	68.8	58.5	52.8	51.7
37.5°	1010.1	998.5	540.6	97.6	82.7	72.3	65.5	53.9	43.6	37.8	36.7
40°	1136.3	1101.8	454.5	86.0	72.3	59.6	50.5	39.0	31.0	27.5	27.5
42.5°	1283.2	1201.7	361.5	78.1	64.2	49.3	36.7	26.4	21.8	20.7	20.7
45°	1439.3	1294.6	268.5	72.3	56.3	39.0	26.4	18.4	16.1	14.9	14.9
47.5°	1600.0	1370.4	187.1	65.5	47.1	29.9	18.4	13.8	11.5	10.3	10.3
50°	1750.3	1419.8	132.0	58.5	40.2	21.8	13.8	10.3	8.1	8.1	8.1
52.5°	1854.7	1415.2	95.2	50.5	31.0	14.9	9.2	6.9	6.9	6.9	6.9
55°	1946.6	1398.0	74.6	43.6	24.1	10.3	6.9	5.7	5.7	4.6	4.6
57.5°	2024.6	1370.4	63.1	35.6	17.2	8.1	4.6	4.6	3.5	3.5	3.5
60°	2091.2	1336.0	52.8	29.9	11.5	5.7	3.5	2.3	2.3	1.1	2.3
62.5°	2181.9	1314.2	45.9	22.9	8.1	3.5	2.3	1.1	1.1	0.0	0.0
65°	2248.4	1272.9	39.0	16.1	4.6	2.3	1.1	1.1	0.0	0.0	0.0
67.5°	2250.7	1198.3	28.6	9.2	3.5	2.3	1.1	0.0	0.0	0.0	0.0
70°	2069.4	1021.5	18.4	4.6	2.3	1.1	1.1	0.0	0.0	0.0	0.0
71°	1903.0	904.4	14.9	3.5	2.3	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1567.8	664.5	11.5	3.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0
75°	864.3	241.0	5.7	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	276.6	73.4	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	47.1	11.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.1	4.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	1.1	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)