

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: P841311

Luminaire Tested: **ARCH4-160-730-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-730-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17631 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 160.7
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

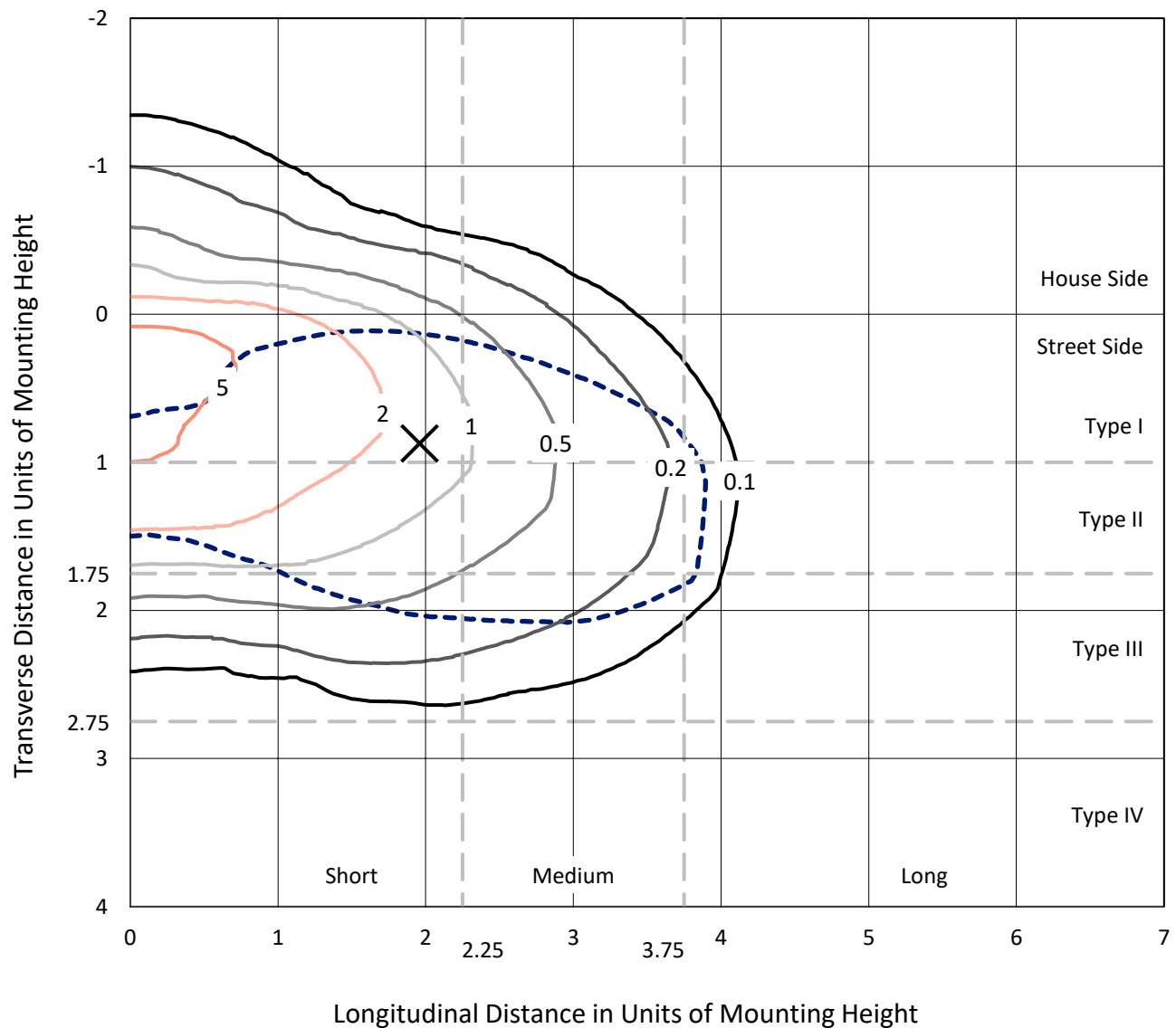


REPORT NUMBER: P841311

CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

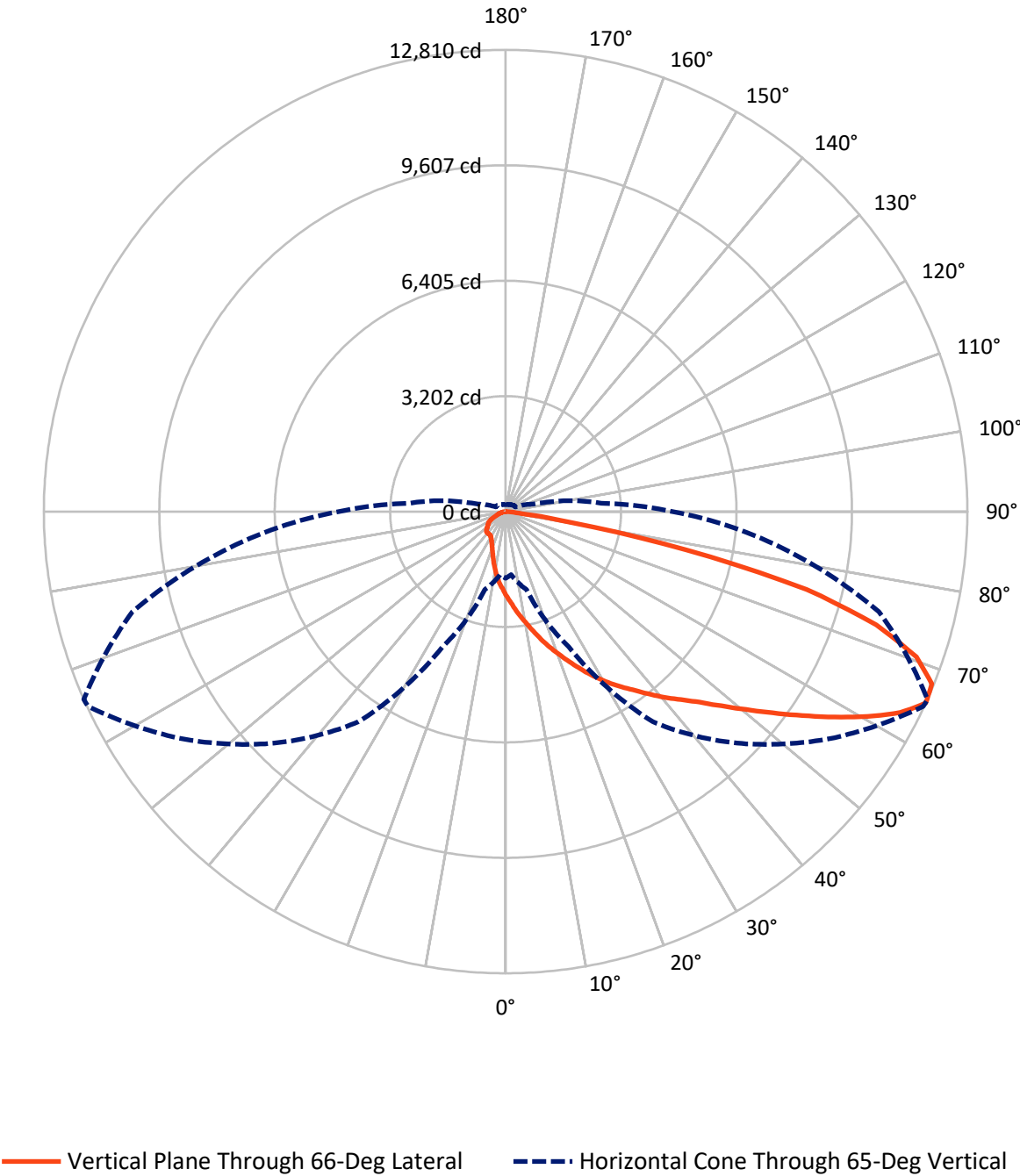
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type III - Short - N/A

REPORT NUMBER: P841311
CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841311

CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1864.9	0.0	1864.9
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	15766.1	0.0	15766.1
	% Fixture	89.4	0.0	89.4
Total	Lumens	17631.0	0.0	17631.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.3	1.3
10°-20°	750.6	4.3
20°-30°	1358.1	7.7
30°-40°	2123.7	12.0
40°-50°	3221.7	18.3
50°-60°	4093.3	23.2
60°-70°	3824.7	21.7
70°-80°	1900.9	10.8
80°-90°	127.7	0.7
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°	17631.0	100.0
0°-180°	17631.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841311

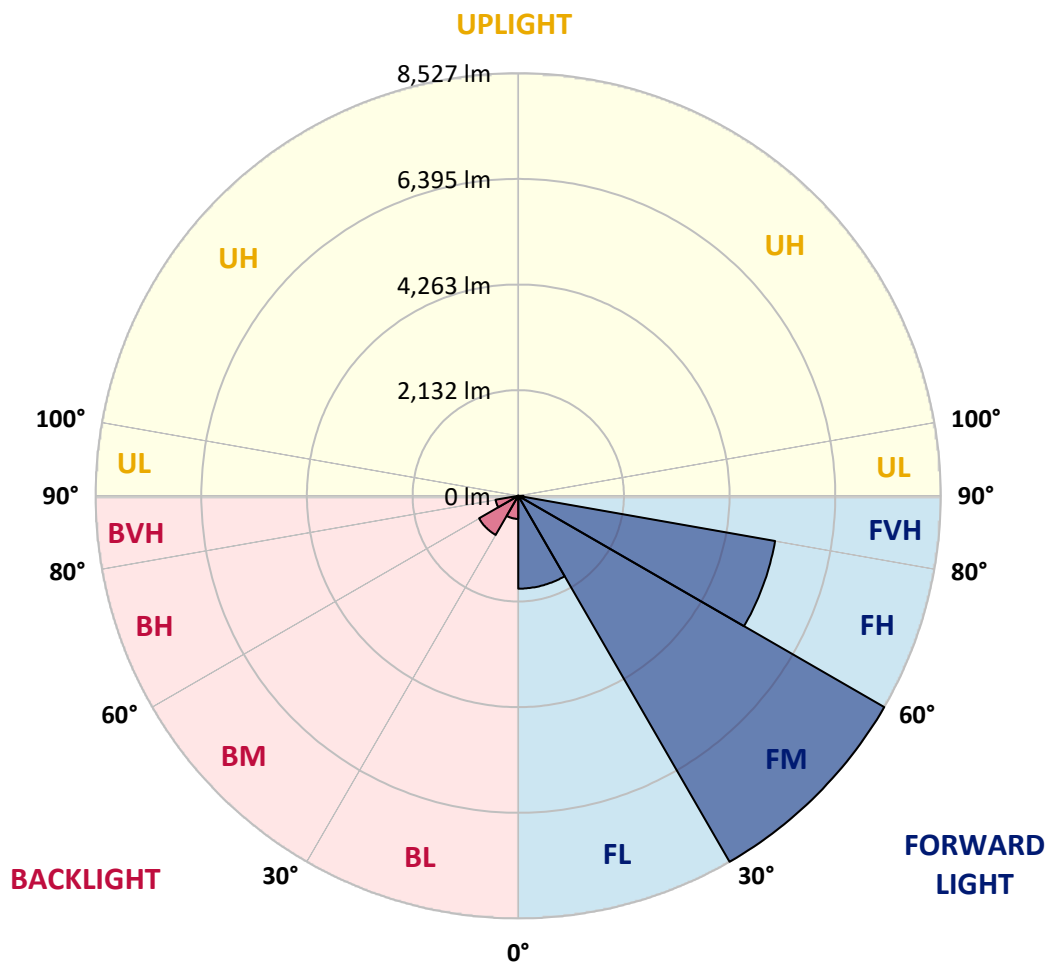
CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1873.3	10.6			
FM	(30°-60°)	8526.5	48.4			
FH	(60°-80°)	5261.2	29.8			G3/7500
FVH	(80°-90°)	105.1	0.6			G2/225
BL	(0°-30°)	465.7	2.6	B1/500		
BM	(30°-60°)	912.1	5.2	B1/1000		
BH	(60°-80°)	464.4	2.6	B1/500		G1/500
BVH	(80°-90°)	22.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



REPORT NUMBER: P841311

CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4
2.5°	2725.3	2747.5	2758.6	2762.3	2677.3	2640.3	2603.3	2518.3	2499.8	2451.7	2388.8
5°	3206.1	3235.7	3228.3	3213.5	3109.9	2991.6	2895.4	2736.4	2710.6	2595.9	2455.4
7.5°	3679.4	3705.3	3697.9	3642.4	3527.8	3361.4	3202.4	2969.4	2932.4	2747.5	2522.0
10°	4075.1	4097.3	4093.6	4038.1	3901.3	3697.9	3505.6	3195.0	3150.6	2888.0	2577.4
12.5°	4400.5	4430.1	4426.4	4389.4	4267.4	4045.5	3827.3	3453.8	3398.4	3058.2	2655.1
15°	4655.6	4692.6	4692.6	4677.8	4592.8	4407.9	4160.1	3738.6	3672.0	3254.1	2751.2
17.5°	4810.9	4840.5	4866.4	4892.3	4833.1	4692.6	4467.0	4023.3	3953.0	3446.4	2851.1
20°	4892.3	4921.9	4940.4	4995.8	5006.9	4936.7	4759.2	4304.3	4230.4	3664.6	2965.7
22.5°	5025.4	5051.3	5055.0	5103.1	5125.3	5143.8	5032.8	4581.7	4522.5	3905.0	3095.1
25°	5247.3	5276.9	5265.8	5288.0	5291.7	5313.9	5302.8	4899.7	4840.5	4178.6	3250.4
27.5°	5532.0	5569.0	5561.6	5539.4	5506.2	5487.7	5535.7	5221.4	5165.9	4452.3	3409.5
30°	5839.0	5883.3	5872.2	5827.9	5739.1	5661.5	5728.0	5524.6	5472.9	4733.3	3586.9
32.5°	6149.6	6201.4	6197.7	6123.7	5972.1	5839.0	5938.8	5809.4	5772.4	5036.5	3779.2
35°	6353.0	6419.5	6412.1	6367.8	6171.8	6057.1	6179.2	6101.5	6075.6	5406.3	4056.6
37.5°	6682.1	6752.3	6689.5	6578.5	6353.0	6293.8	6441.7	6430.6	6412.1	5798.3	4348.7
40°	7480.8	7584.4	7418.0	6963.1	6593.3	6541.6	6752.3	6796.7	6778.2	6186.6	4611.3
42.5°	8316.5	8471.9	8213.0	7584.4	7029.7	6841.1	7092.5	7155.4	7133.2	6519.4	4847.9
45°	8823.2	8889.7	8630.9	8142.7	7802.5	7203.5	7454.9	7558.5	7540.0	6918.7	5151.2
47.5°	9237.3	9211.4	8915.6	8586.5	8649.4	7713.8	7865.4	8068.8	8054.0	7358.8	5484.0
50°	9326.1	9266.9	9148.6	8941.5	9107.9	8231.5	8298.1	8649.4	8634.6	7846.9	5820.5
52.5°	8701.1	8623.5	8945.2	9119.0	9063.5	8608.7	8775.1	9285.4	9278.0	8375.7	6142.2
55°	7140.6	7077.8	7943.1	8841.6	9015.4	8874.9	9303.9	9947.3	9988.0	8937.8	6434.3
57.5°	5617.1	5550.5	6401.0	8146.4	8837.9	9119.0	9921.4	10705.4	10757.2	9547.9	6711.7
60°	4478.1	4378.3	5029.1	7051.9	8505.1	9307.6	10516.8	11537.4	11544.8	10106.3	6881.8
62.5°	3043.4	2932.4	3653.5	5665.2	7946.8	9337.2	10975.3	12254.8	12284.4	10524.2	6911.3
65°	1848.9	1756.5	2244.6	4137.9	7122.1	9085.7	10982.7	12783.6	12809.5	10716.5	6733.9
67.5°	1072.4	1035.4	1283.2	2577.4	5753.9	8409.0	10520.5	12702.2	12750.3	10635.1	6330.8
70°	624.9	621.2	713.7	1275.8	4060.3	7066.7	9488.8	12018.1	12088.4	10209.9	5713.2
72.5°	458.5	465.9	502.9	684.1	2351.9	5088.3	8035.5	10642.5	10749.8	9377.8	4833.1
75°	362.4	366.1	399.4	465.9	1235.1	2877.0	6020.2	8542.1	8627.2	7895.0	3775.5
77.5°	269.9	277.3	303.2	329.1	573.2	1320.1	3387.3	5262.1	5121.6	4333.9	1823.1
80°	196.0	214.5	225.6	236.7	303.2	510.3	1016.9	1834.2	1819.4	1893.3	861.6
82.5°	125.7	140.5	151.6	159.0	181.2	244.1	303.2	410.5	443.7	735.9	343.9
85°	55.5	62.9	70.3	85.1	77.7	85.1	125.7	81.4	70.3	110.9	62.9
87.5°	0.0	0.0	11.1	18.5	14.8	7.4	22.2	14.8	11.1	11.1	11.1
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: P841311

CATALOG NUMBER: ARCH4-160-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4	2333.4
2.5°	2355.6	2314.9	2229.8	2148.5	2100.4	2037.5	1982.1	1930.3	1926.6	1911.8	1885.9
5°	2385.1	2307.5	2148.5	1996.9	1882.2	1760.2	1656.7	1575.3	1545.7	1523.5	1493.9
7.5°	2414.7	2292.7	2056.0	1834.2	1653.0	1482.9	1360.8	1249.9	1216.6	1187.0	1168.5
10°	2425.8	2266.8	1948.8	1653.0	1416.3	1235.1	1105.7	1024.3	994.7	979.9	968.8
12.5°	2459.1	2252.0	1848.9	1482.9	1209.2	1042.8	950.4	902.3	891.2	880.1	869.0
15°	2503.5	2252.0	1749.1	1316.4	1046.5	913.4	857.9	824.6	817.2	813.5	806.1
17.5°	2551.5	2252.0	1653.0	1175.9	928.2	828.3	787.6	769.2	765.5	761.8	758.1
20°	2618.1	2255.7	1549.4	1053.9	843.1	765.5	732.2	710.0	706.3	702.6	702.6
22.5°	2684.7	2263.1	1449.6	961.5	787.6	717.4	676.7	654.5	647.1	647.1	647.1
25°	2769.7	2285.3	1357.1	883.8	739.6	673.0	621.2	602.8	599.1	599.1	595.4
27.5°	2869.6	2311.2	1275.8	824.6	691.5	621.2	569.5	551.0	543.6	543.6	539.9
30°	2976.8	2337.1	1209.2	780.3	643.4	569.5	521.4	499.2	491.8	495.5	491.8
32.5°	3095.1	2374.0	1157.4	750.7	599.1	525.1	480.7	454.8	451.1	451.1	447.4
35°	3294.8	2477.6	1150.0	735.9	562.1	491.8	447.4	421.6	417.9	417.9	414.2
37.5°	3509.3	2595.9	1183.3	728.5	532.5	462.2	421.6	395.7	392.0	392.0	392.0
40°	3690.5	2684.7	1220.3	728.5	514.0	436.4	399.4	377.2	377.2	377.2	377.2
42.5°	3812.5	2692.1	1212.9	728.5	499.2	417.9	384.6	362.4	362.4	366.1	362.4
45°	3993.7	2729.0	1183.3	717.4	488.1	403.1	369.8	351.3	347.6	351.3	351.3
47.5°	4208.2	2795.6	1153.7	673.0	484.4	388.3	358.7	336.5	332.8	336.5	332.8
50°	4411.6	2854.8	1138.9	613.8	477.0	373.5	343.9	321.7	318.0	321.7	318.0
52.5°	4581.7	2880.7	1113.1	573.2	458.5	358.7	329.1	306.9	299.5	303.2	303.2
55°	4718.5	2873.3	1076.1	539.9	425.3	343.9	310.6	292.1	281.0	281.0	277.3
57.5°	4844.2	2877.0	1042.8	506.6	388.3	321.7	295.8	273.6	258.9	255.2	251.5
60°	4892.3	2858.5	983.6	462.2	351.3	303.2	277.3	251.5	236.7	233.0	229.3
62.5°	4825.7	2791.9	906.0	384.6	318.0	281.0	258.9	233.0	218.2	214.5	210.8
65°	4637.1	2666.2	787.6	303.2	288.4	255.2	236.7	218.2	199.7	192.3	188.6
67.5°	4315.4	2485.0	639.7	244.1	255.2	233.0	221.9	199.7	177.5	170.1	166.4
70°	3856.9	2244.6	480.7	207.1	225.6	207.1	199.7	177.5	159.0	151.6	147.9
72.5°	3213.5	1856.3	336.5	177.5	196.0	181.2	173.8	159.0	140.5	129.4	129.4
75°	2429.5	1331.2	221.9	151.6	162.7	155.3	144.2	133.1	122.0	114.6	110.9
77.5°	1046.5	517.7	136.8	114.6	133.1	129.4	114.6	107.2	103.5	96.1	96.1
80°	451.1	210.8	85.1	85.1	96.1	92.4	88.7	81.4	81.4	77.7	74.0
82.5°	166.4	85.1	51.8	62.9	70.3	62.9	62.9	62.9	62.9	59.2	59.2
85°	40.7	25.9	25.9	37.0	40.7	37.0	40.7	37.0	37.0	37.0	33.3
87.5°	11.1	11.1	14.8	14.8	14.8	14.8	14.8	11.1	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)