

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: P239351

Luminaire Tested: **UTLD-AF24-90-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-42-U0)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-90-D-U-T2U-HSS
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
PHOTOMETRIC DATA REPORTED FOR LOWER HEMISPHERE ONLY. MINIMAL LIGHT IN
UPPER HEMISPHERE NOT REPORTED.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5914 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

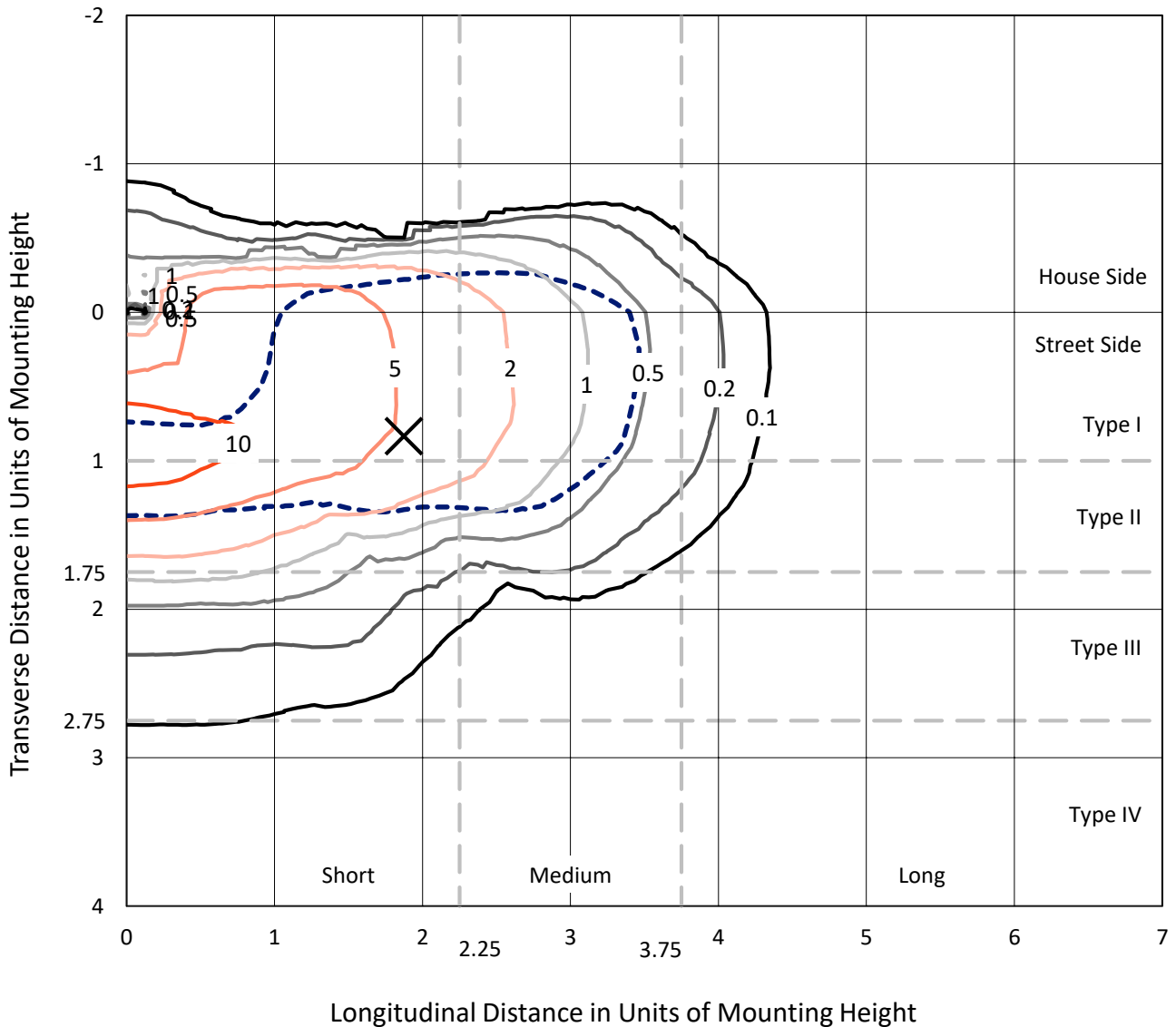
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

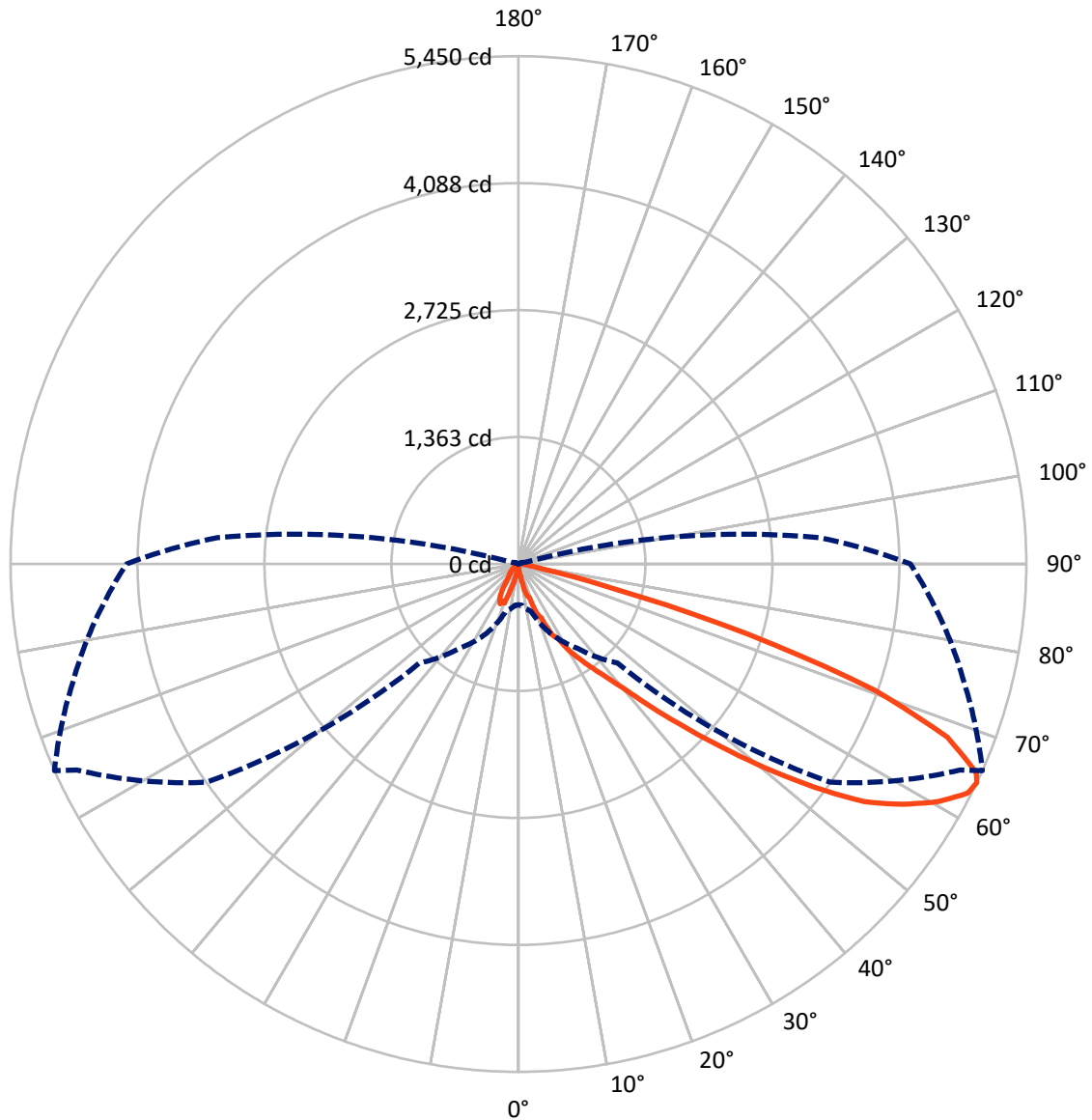
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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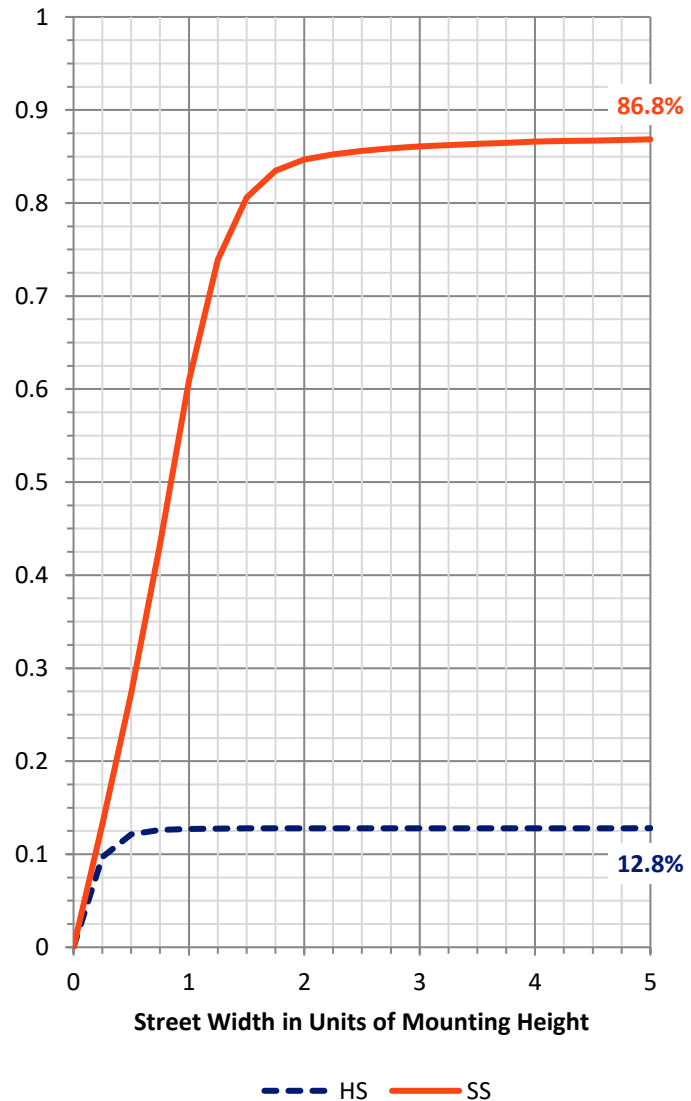
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	766.4	0.0	766.4
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	5147.7	0.0	5147.7
	% Fixture	87.0	0.0	87.0
Total	Lumens	5914.0	0.0	5914.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	0.1
10°-20°	77.2	1.3
20°-30°	239.9	4.1
30°-40°	602.4	10.2
40°-50°	1306.6	22.1
50°-60°	1769.1	29.9
60°-70°	1390.7	23.5
70°-80°	491.8	8.3
80°-90°	29.6	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°	5914.0	100.0
0°-180°	5914.0	100.0



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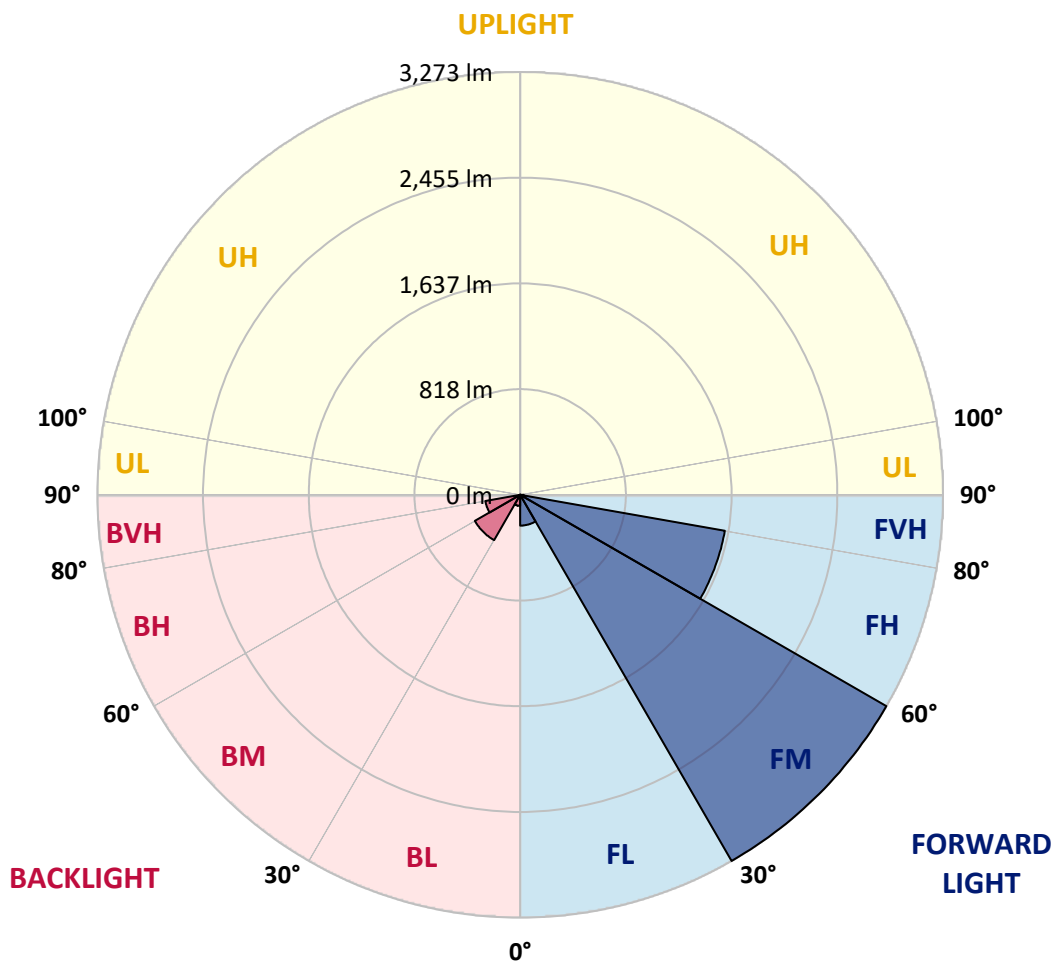
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	238.3	4.0			
FM	(30°-60°)	3273.2	55.3			
FH	(60°-80°)	1608.6	27.2			G1/1800
FVH	(80°-90°)	27.6	0.5			G1/100
BL	(0°-30°)	85.6	1.4	B0/110		
BM	(30°-60°)	404.8	6.8	B1/1000		
BH	(60°-80°)	273.9	4.6	B1/500		G1/500
BVH	(80°-90°)	2.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	22.0	21.0	18.0	14.0	5.0	3.0	0.0	0.0	0.0	0.0	0.0
5°	177.8	178.8	179.8	179.8	179.8	178.8	67.9	5.0	4.0	0.0	0.0
7.5°	172.8	173.8	173.8	173.8	174.8	174.8	174.8	168.8	138.8	3.0	0.0
10°	326.6	327.6	329.6	239.7	178.8	171.8	171.8	139.8	134.8	18.0	7.0
12.5°	321.6	322.6	324.6	325.6	327.6	217.7	181.8	249.7	266.7	346.6	226.7
15°	371.5	388.5	350.5	328.6	328.6	308.6	365.5	353.5	354.5	360.5	232.7
17.5°	486.4	485.4	489.4	493.4	360.5	452.4	474.4	370.5	374.5	420.5	427.4
20°	503.4	505.3	500.4	508.3	596.2	475.4	474.4	565.3	561.3	562.3	506.3
22.5°	685.1	687.1	694.1	576.3	623.2	588.2	619.2	631.2	631.2	591.2	596.2
25°	737.1	733.1	740.0	729.1	734.1	711.1	669.1	806.0	843.9	807.0	803.0
27.5°	1023.7	1014.7	993.7	813.0	799.0	755.0	881.9	903.8	904.8	897.8	930.8
30°	1212.4	1215.4	1157.5	1059.6	888.9	869.9	974.7	1055.6	1083.6	1175.5	1147.5
32.5°	1808.7	1771.7	1606.9	1258.4	1097.6	1023.7	1084.6	1240.4	1221.4	1282.3	1282.3
35°	2365.0	2300.0	2049.4	1695.8	1284.3	1140.5	1288.3	1336.3	1373.2	1425.2	1443.1
37.5°	2920.2	2894.3	2632.6	2152.2	1654.9	1333.3	1454.1	1546.0	1542.0	1609.9	1644.9
40°	3413.6	3380.6	3207.9	2722.5	2096.3	1624.9	1687.8	1778.7	1771.7	1900.6	1948.5
42.5°	3781.1	3759.2	3646.3	3154.9	2641.6	2120.3	2037.4	2076.3	2101.3	2239.1	2288.1
45°	3981.9	3942.9	3910.0	3498.5	3116.0	2714.5	2499.8	2452.8	2482.8	2618.6	2652.6
47.5°	3938.9	3891.0	3937.9	3703.2	3533.4	3233.8	3109.0	2952.2	2930.2	3105.0	3041.1
50°	3603.4	3573.4	3719.2	3703.2	3773.1	3664.3	3798.1	3477.5	3442.6	3540.4	3428.6
52.5°	3009.1	3009.1	3234.8	3382.6	3769.1	3972.9	4399.3	4037.8	3980.9	3962.9	3723.2
55°	2397.9	2413.9	2625.6	2839.3	3440.6	4055.8	4901.7	4552.1	4502.2	4264.5	3944.9
57.5°	1734.8	1752.7	2055.4	2234.1	2821.4	3772.1	5093.4	4884.7	4864.7	4506.2	4149.7
60°	1016.7	1059.6	1380.2	1680.8	2037.4	3037.1	5017.5	5113.4	5177.3	4700.9	4299.5
62.5°	599.2	617.2	729.1	1139.5	1408.2	2066.3	4602.1	5227.3	5413.0	4865.7	4416.3
64°	437.4	446.4	526.3	824.9	1102.6	1501.1	4079.7	5227.3	5450.0	4954.6	4448.3
65°	357.5	361.5	417.5	660.1	932.8	1148.5	3589.4	5183.3	5401.0	4998.6	4441.3
67.5°	290.6	293.6	307.6	377.5	642.2	631.2	2122.3	4794.8	4966.6	5046.5	4333.4
70°	261.7	264.7	288.6	294.6	474.4	420.5	684.1	3940.9	4056.8	4798.8	4103.7
72.5°	198.7	206.7	249.7	286.6	328.6	314.6	327.6	2429.9	2564.7	3654.3	3501.5
75°	135.8	143.8	185.8	243.7	253.7	236.7	246.7	932.8	1044.7	1898.6	2112.3
77.5°	86.9	87.9	115.9	176.8	226.7	161.8	186.8	262.7	305.6	643.2	658.2
80°	56.9	58.9	69.9	112.9	154.8	134.8	114.9	141.8	143.8	189.8	100.9
82.5°	35.0	34.0	45.9	69.9	94.9	113.9	70.9	91.9	95.9	111.9	42.9
85°	15.0	16.0	29.0	44.9	58.9	54.9	43.9	55.9	57.9	73.9	25.0
87.5°	6.0	6.0	17.0	25.0	26.0	26.0	27.0	30.0	30.0	45.9	16.0
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	1.0	1.0	0.0	0.0	4.0	91.9	131.8	131.8
10°	7.0	6.0	0.0	1.0	1.0	45.9	146.8	146.8	143.8	141.8	140.8
12.5°	224.7	258.7	247.7	106.9	82.9	130.8	138.8	122.8	109.9	103.9	101.9
15°	268.7	267.7	260.7	211.7	296.6	132.8	105.9	127.8	109.9	94.9	94.9
17.5°	447.4	424.5	354.5	287.6	268.7	179.8	106.9	72.9	59.9	55.9	55.9
20°	532.3	522.3	456.4	443.4	245.7	147.8	74.9	49.9	56.9	63.9	63.9
22.5°	654.2	649.2	479.4	422.5	244.7	89.9	59.9	59.9	58.9	55.9	55.9
25°	786.0	791.0	676.1	447.4	166.8	74.9	61.9	51.9	45.9	49.9	50.9
27.5°	958.8	832.9	681.1	412.5	113.9	69.9	52.9	49.9	48.9	46.9	46.9
30°	1154.5	1127.5	871.9	343.6	86.9	62.9	49.9	43.9	38.9	40.9	40.9
32.5°	1289.3	1206.4	855.9	259.7	74.9	54.9	42.9	37.0	38.0	38.9	38.0
35°	1425.2	1331.3	862.9	166.8	66.9	44.9	35.0	33.0	32.0	36.0	36.0
37.5°	1617.9	1499.1	849.9	104.9	55.9	37.0	30.0	29.0	30.0	31.0	31.0
40°	1854.6	1718.8	818.9	78.9	45.9	30.0	25.0	24.0	26.0	26.0	26.0
42.5°	2138.2	1958.5	738.0	68.9	38.9	24.0	20.0	20.0	22.0	22.0	22.0
45°	2476.8	2251.1	635.2	60.9	33.0	20.0	16.0	17.0	18.0	18.0	18.0
47.5°	2849.3	2572.7	504.4	52.9	28.0	16.0	13.0	13.0	14.0	14.0	14.0
50°	3193.9	2838.3	397.5	46.9	23.0	13.0	10.0	10.0	10.0	10.0	10.0
52.5°	3447.6	3013.1	289.6	40.9	20.0	10.0	7.0	7.0	7.0	7.0	7.0
55°	3654.3	3129.0	209.7	35.0	16.0	8.0	5.0	4.0	5.0	4.0	4.0
57.5°	3836.1	3201.9	150.8	29.0	13.0	5.0	2.0	2.0	2.0	2.0	2.0
60°	4000.8	3240.8	111.9	24.0	11.0	3.0	2.0	1.0	1.0	0.0	0.0
62.5°	4150.7	3254.8	84.9	19.0	9.0	2.0	1.0	0.0	0.0	0.0	0.0
64°	4205.6	3241.8	72.9	17.0	8.0	1.0	1.0	0.0	0.0	0.0	0.0
65°	4222.6	3210.9	65.9	15.0	7.0	1.0	1.0	0.0	0.0	0.0	0.0
67.5°	4170.6	3070.0	48.9	12.0	6.0	1.0	1.0	0.0	0.0	0.0	0.0
70°	3967.9	2804.4	36.0	10.0	4.0	0.0	1.0	0.0	0.0	0.0	0.0
72.5°	3244.8	2117.3	26.0	8.0	4.0	0.0	1.0	0.0	0.0	0.0	0.0
75°	1948.5	892.8	19.0	6.0	4.0	0.0	2.0	0.0	0.0	0.0	0.0
77.5°	588.2	287.6	14.0	5.0	5.0	0.0	3.0	1.0	0.0	0.0	0.0
80°	78.9	42.9	8.0	4.0	5.0	0.0	4.0	1.0	0.0	0.0	0.0
82.5°	29.0	14.0	5.0	4.0	5.0	0.0	4.0	3.0	1.0	1.0	0.0
85°	11.0	8.0	4.0	3.0	6.0	0.0	5.0	3.0	1.0	1.0	0.0
87.5°	5.0	4.0	3.0	3.0	6.0	0.0	5.0	4.0	1.0	1.0	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)