

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: LUMARK

Report Number: P962097

Luminaire Tested: **NAV-SB2B-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7852.5 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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



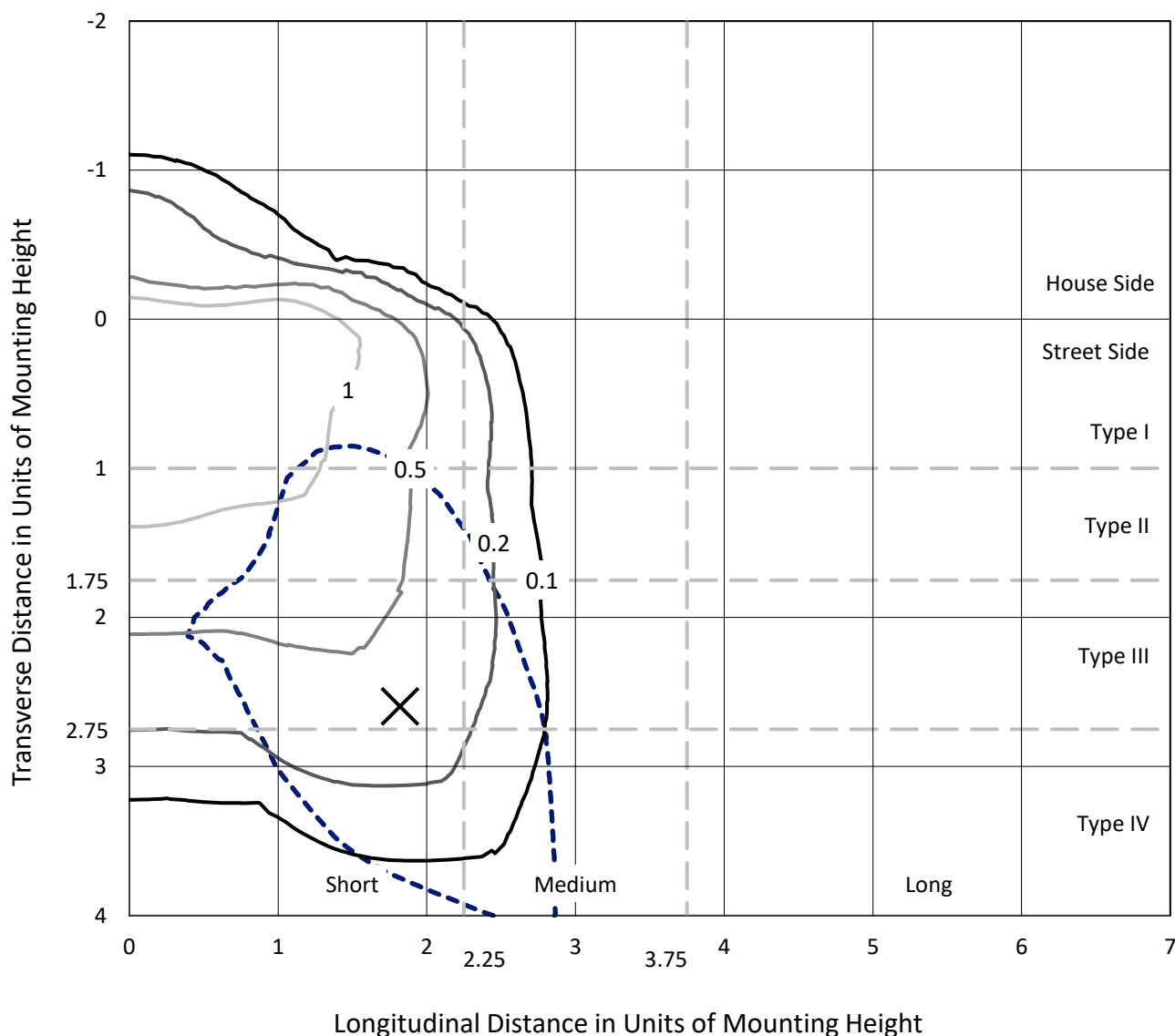
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

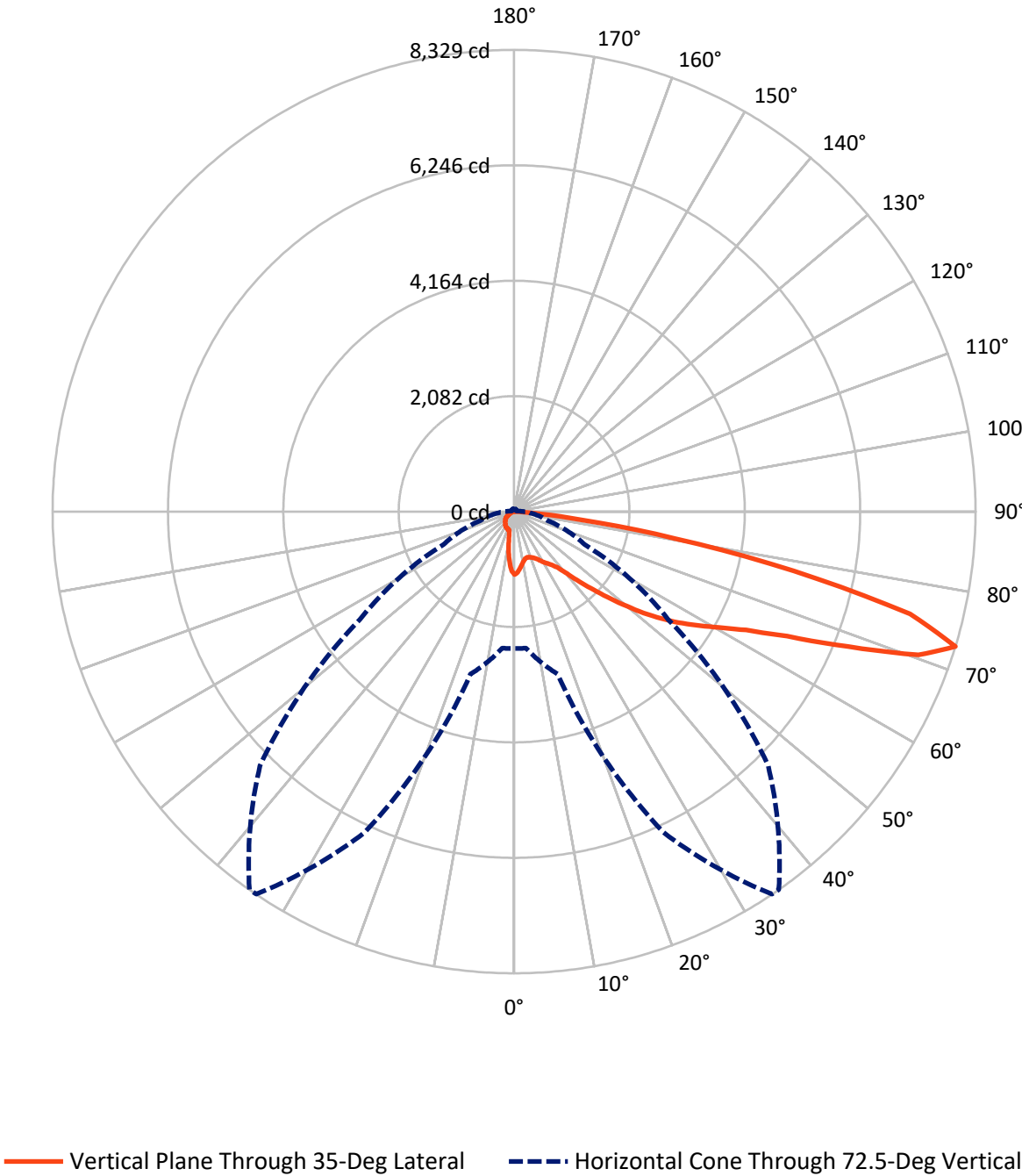


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	883.8	0.0	883.8
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6968.7	0.0	6968.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	7852.5	0.0	7852.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	1.2
10°-20°	218.8	2.8
20°-30°	355.4	4.5
30°-40°	593.0	7.6
40°-50°	1121.9	14.3
50°-60°	1782.8	22.7
60°-70°	2205.4	28.1
70°-80°	1370.9	17.5
80°-90°	110.8	1.4
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°	7852.5	100.0
0°-180°	7852.5	100.0

Coefficient of Utilization



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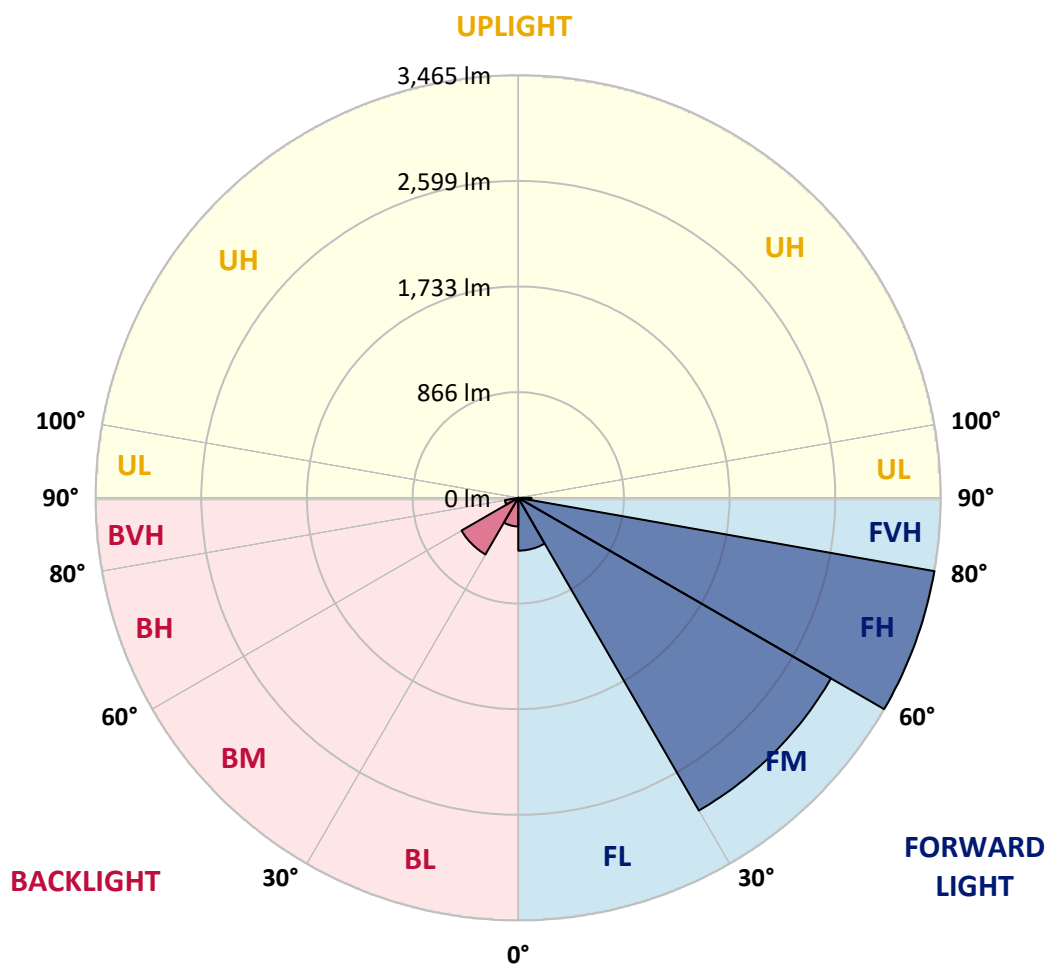
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	432.9	5.5			
FM	(30°-60°)	2961.2	37.7			
FH	(60°-80°)	3465.4	44.1			G2/5000
FVH	(80°-90°)	109.3	1.4			G2/225
BL	(0°-30°)	234.8	3.0	B1/500		
BM	(30°-60°)	536.5	6.8	B1/1000		
BH	(60°-80°)	110.9	1.4	B1/500		G1/500
BVH	(80°-90°)	1.5	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1
2.5°	1087.4	1096.6	1098.4	1101.3	1101.3	1104.7	1110.5	1118.6	1131.8	1138.7	1143.3
5°	1002.3	1009.2	1017.8	1024.8	1038.0	1039.7	1062.1	1084.0	1114.5	1137.5	1153.6
7.5°	916.6	924.7	936.1	952.8	970.1	975.3	1009.2	1046.0	1094.4	1137.5	1164.6
10°	856.2	856.7	867.0	883.8	911.4	917.7	959.2	1011.5	1071.9	1130.6	1175.0
12.5°	822.3	826.3	830.9	843.5	870.0	874.0	918.3	979.9	1049.5	1126.6	1186.9
15°	822.3	825.1	828.0	834.2	855.6	859.1	898.2	959.7	1038.0	1128.3	1206.5
17.5°	830.9	835.5	833.1	840.6	863.0	865.4	899.8	954.0	1037.4	1139.3	1236.5
20°	851.6	855.1	850.4	855.1	877.4	882.0	917.7	964.9	1047.1	1158.2	1273.9
22.5°	884.4	886.1	875.1	878.6	901.6	907.3	948.8	996.0	1070.8	1188.7	1323.9
25°	925.8	929.3	912.6	916.6	938.4	945.4	993.1	1042.6	1108.1	1230.7	1387.8
27.5°	973.5	975.3	960.8	960.3	988.5	998.2	1046.6	1100.1	1158.2	1283.7	1468.3
30°	1028.2	1033.4	1019.6	1017.3	1053.0	1061.0	1108.7	1170.9	1231.8	1363.0	1582.9
32.5°	1071.3	1075.3	1067.3	1073.1	1109.4	1115.6	1184.1	1271.0	1347.6	1475.8	1738.8
35°	1133.4	1135.8	1117.4	1127.7	1169.1	1185.3	1287.1	1411.4	1493.1	1617.3	1942.5
37.5°	1358.4	1358.4	1280.2	1229.0	1268.7	1283.1	1428.1	1588.0	1672.6	1807.3	2199.1
40°	1669.7	1664.6	1550.1	1445.4	1440.1	1468.3	1628.9	1810.7	1904.4	2035.1	2487.9
42.5°	2001.7	1993.7	1837.7	1734.2	1716.9	1726.7	1860.8	2085.2	2180.7	2313.0	2798.7
45°	2296.3	2294.1	2151.4	2012.1	1981.0	2012.1	2150.1	2406.2	2474.7	2614.0	3108.7
47.5°	2543.1	2543.1	2439.0	2348.1	2332.0	2350.4	2542.0	2762.4	2756.0	2934.4	3410.8
50°	2827.4	2825.1	2726.1	2687.0	2703.6	2729.6	2993.1	3137.5	3047.2	3249.1	3680.7
52.5°	3026.5	3040.3	3006.3	3000.0	3085.1	3130.0	3451.1	3504.6	3307.9	3547.7	3882.6
55°	3184.2	3200.3	3239.4	3283.7	3447.7	3506.3	3894.7	3852.8	3525.9	3806.6	3998.8
57.5°	3407.4	3384.3	3444.8	3532.3	3797.5	3868.2	4324.6	4181.3	3701.4	4016.7	4011.5
60°	3678.4	3681.8	3692.2	3802.6	4146.7	4237.7	4748.0	4492.0	3814.1	4145.6	3871.1
62.5°	4004.1	4009.2	4030.5	4200.2	4615.7	4701.4	5199.1	4746.3	3866.0	4109.3	3508.7
65°	3981.6	4003.4	4241.1	4821.7	5328.6	5413.1	5725.5	4924.6	3787.7	3777.9	2856.8
67.5°	3627.2	3662.8	4060.4	5563.9	6403.4	6497.7	6362.0	4959.8	3449.9	2937.9	1863.7
70°	3162.2	3174.9	3653.1	6231.3	7647.9	7743.4	6931.6	4573.7	2618.0	1638.7	834.9
72.5°	2469.5	2472.4	3033.4	6386.1	8323.4	8328.5	6484.5	3395.3	1407.9	629.5	290.0
75°	1764.1	1746.8	2031.7	5178.9	7322.8	7381.5	4861.4	1592.6	538.0	297.5	144.4
77.5°	945.9	964.9	1149.6	3071.3	5058.7	5158.8	2652.5	459.2	273.9	202.5	95.5
80°	292.3	308.4	471.2	1406.2	2865.4	2925.8	983.3	204.3	191.1	144.4	62.7
82.5°	92.0	95.5	219.8	590.9	1189.3	1216.9	284.8	115.6	130.6	95.5	36.8
85°	26.4	27.1	97.8	220.4	294.0	299.8	79.9	44.9	74.8	59.2	19.0
87.5°	2.9	9.2	36.8	36.8	25.9	25.3	8.6	9.7	21.3	7.5	3.5
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°	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1	1138.1
2.5°	1140.4	1140.9	1133.4	1120.8	1107.0	1095.5	1081.2	1069.6	1061.6	1059.2	1063.3
5°	1148.4	1144.4	1123.1	1084.6	1038.5	998.9	954.6	919.4	896.5	886.6	890.1
7.5°	1160.5	1149.0	1102.4	1026.4	938.4	860.2	780.7	719.2	680.1	660.5	663.4
10°	1170.9	1147.9	1067.9	942.5	807.8	689.3	582.3	508.1	466.6	447.1	447.6
12.5°	1180.7	1147.3	1023.1	843.0	660.5	515.6	416.0	379.1	367.7	363.7	362.4
15°	1199.0	1149.0	966.7	729.0	513.8	389.5	353.3	352.7	355.0	353.8	353.3
17.5°	1224.4	1150.8	902.7	608.1	396.5	343.5	341.7	347.0	350.4	348.7	348.1
20°	1257.2	1157.6	834.9	488.5	340.6	332.0	336.0	340.6	343.5	340.6	340.1
22.5°	1303.2	1169.7	760.7	392.4	322.8	325.1	328.5	333.7	336.6	332.6	332.0
25°	1359.7	1188.7	687.6	341.2	314.2	317.0	322.3	328.0	331.4	327.4	326.8
27.5°	1432.6	1219.2	620.2	329.6	305.6	307.3	314.8	323.4	328.0	322.8	322.8
30°	1538.5	1269.3	562.1	334.9	300.3	296.3	306.7	318.8	323.9	319.3	318.8
32.5°	1679.0	1340.1	526.4	343.0	298.1	283.6	293.5	308.9	317.6	314.8	314.8
35°	1863.0	1447.6	512.7	352.1	296.3	270.4	277.4	294.0	308.9	311.8	311.8
37.5°	2086.3	1597.3	516.7	356.2	291.1	259.5	262.9	277.4	296.9	306.1	308.4
40°	2340.1	1771.6	539.7	352.1	285.4	250.3	250.8	261.8	279.1	292.8	297.5
42.5°	2601.9	1975.3	582.3	337.1	280.2	242.2	240.5	247.9	259.5	269.3	273.3
45°	2851.0	2184.7	624.3	316.4	273.9	234.2	230.1	233.0	235.3	239.3	241.7
47.5°	3068.4	2332.0	612.2	297.5	265.3	225.0	218.0	216.9	210.0	209.4	208.9
50°	3218.7	2364.3	543.8	278.5	252.6	214.6	203.7	196.8	184.7	179.0	179.5
52.5°	3266.4	2237.1	444.2	259.5	231.9	200.8	185.3	174.4	159.4	154.2	153.6
55°	3203.1	1987.9	355.0	236.5	203.2	182.3	165.1	150.8	138.7	132.3	132.3
57.5°	3048.4	1670.9	280.7	209.4	172.6	161.6	144.4	130.1	119.7	113.4	112.2
60°	2791.7	1326.9	222.1	177.2	147.3	139.2	121.4	112.2	103.0	95.5	93.8
62.5°	2402.2	947.1	174.4	140.4	123.1	113.9	103.5	96.7	85.7	75.3	73.7
65°	1874.6	579.4	134.7	103.0	99.0	94.4	88.0	81.7	68.5	58.1	56.4
67.5°	1182.4	274.5	96.0	77.7	78.2	76.0	73.1	67.9	58.1	48.9	47.8
70°	520.7	132.9	63.2	59.2	58.1	58.1	60.4	58.7	49.5	40.9	39.2
72.5°	177.2	71.3	47.2	44.9	42.0	41.4	50.6	48.9	39.7	31.7	29.9
75°	92.7	47.8	34.5	32.2	25.3	30.5	40.3	37.9	28.2	20.7	19.0
77.5°	60.4	33.9	23.6	20.7	14.3	20.1	29.9	26.4	16.7	10.4	9.2
80°	37.9	22.4	13.8	9.7	6.9	11.0	16.1	11.5	6.4	2.3	1.7
82.5°	20.1	11.5	5.2	3.5	2.9	3.5	4.0	2.9	1.1	0.0	0.0
85°	8.1	4.0	1.7	1.1	0.6	0.0	1.1	0.6	0.0	0.0	0.0
87.5°	2.9	0.6	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)