

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: P963669

Luminaire Tested: **NAV-SB3A-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10495 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.7
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

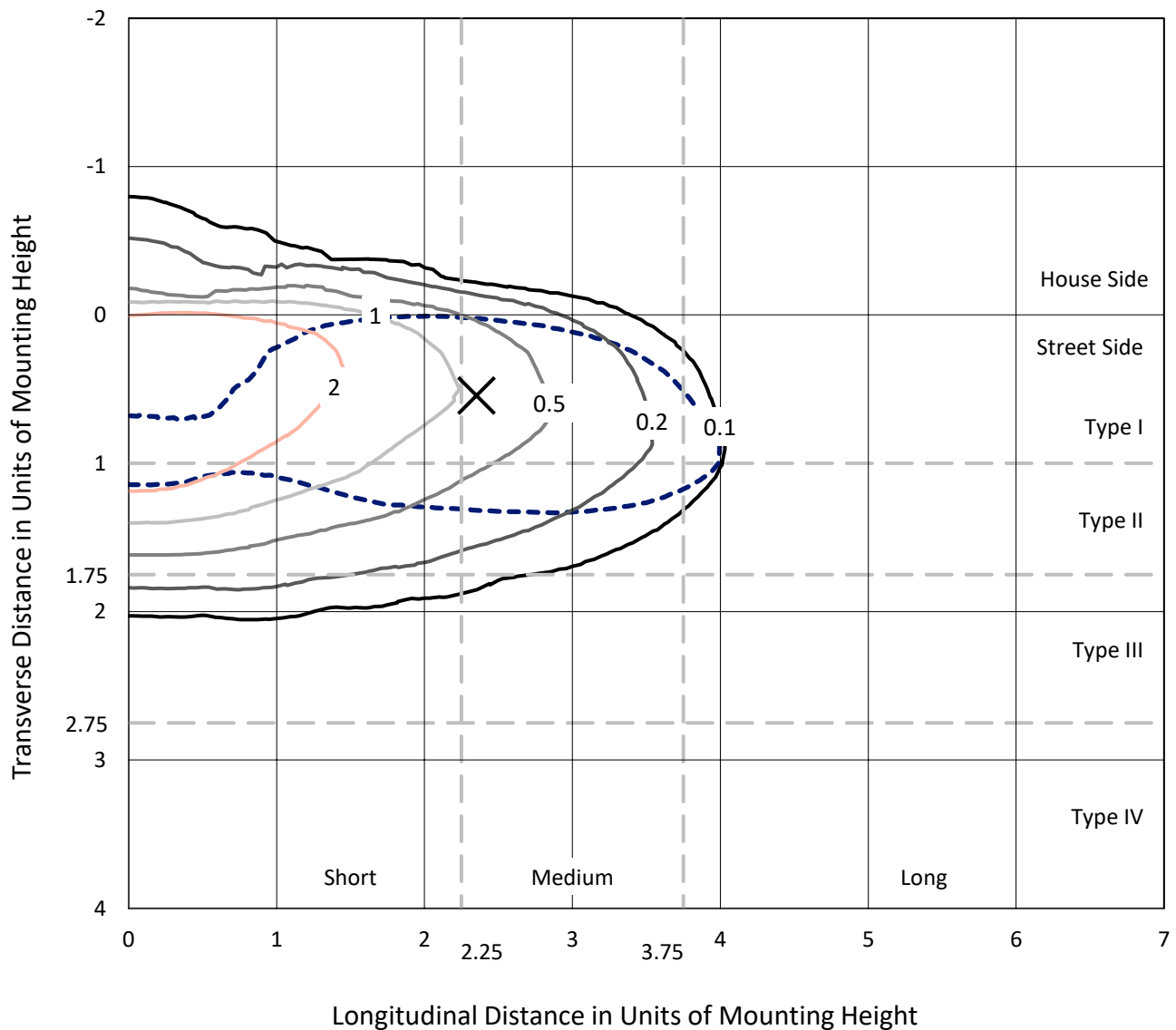


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Iso-Footcandle Lines of Horizontal Illumination

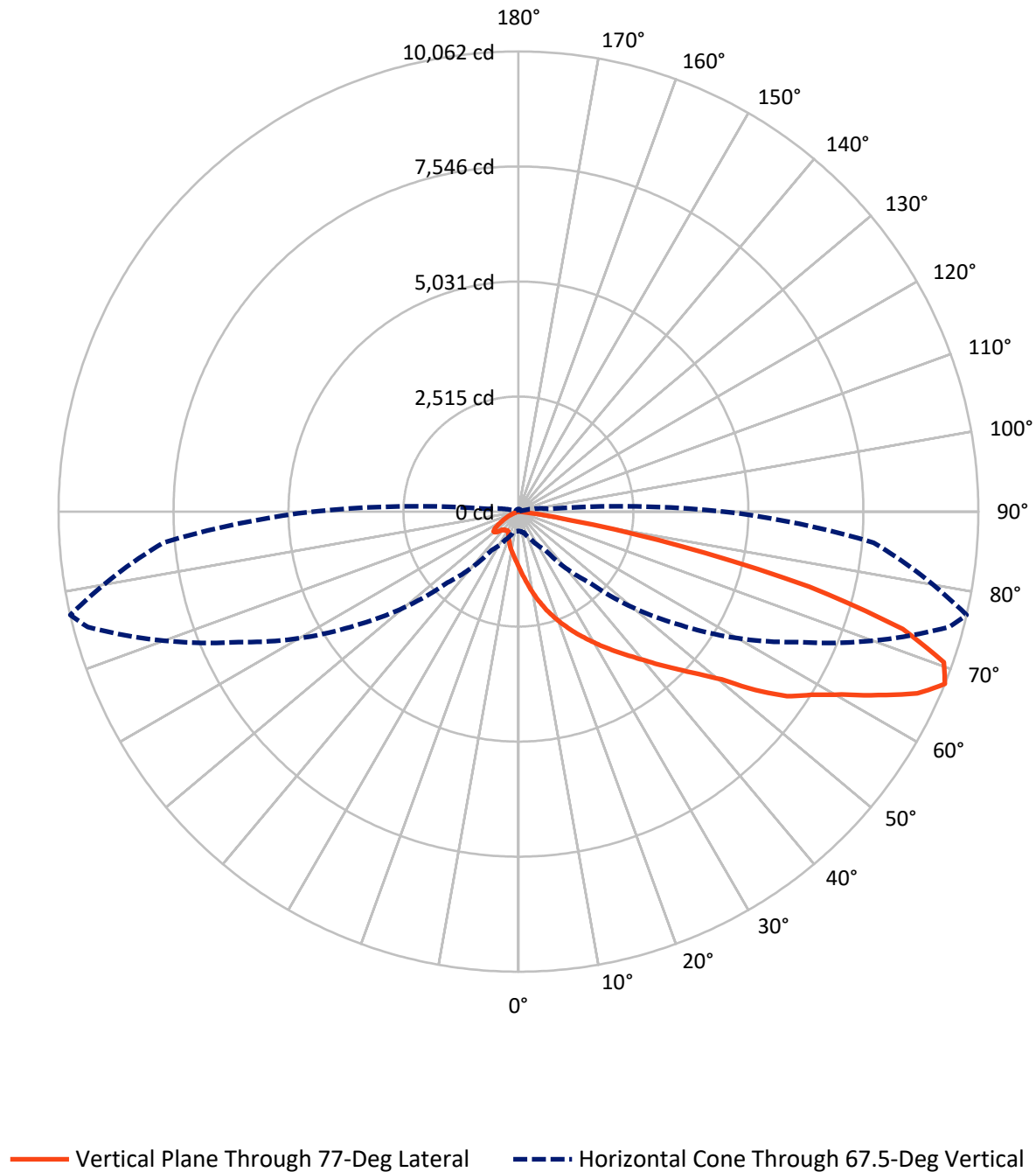
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	772.1	0.0	772.1
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	9722.8	0.0	9722.8
	% Fixture	92.6	0.0	92.6
Total	Lumens	10495.0	0.0	10495.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	1.2
10°-20°	432.6	4.1
20°-30°	834.7	8.0
30°-40°	1449.1	13.8
40°-50°	2104.1	20.0
50°-60°	2416.3	23.0
60°-70°	2097.8	20.0
70°-80°	988.1	9.4
80°-90°	48.9	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°	10495.0	100.0
0°-180°	10495.0	100.0

Coefficient of Utilization



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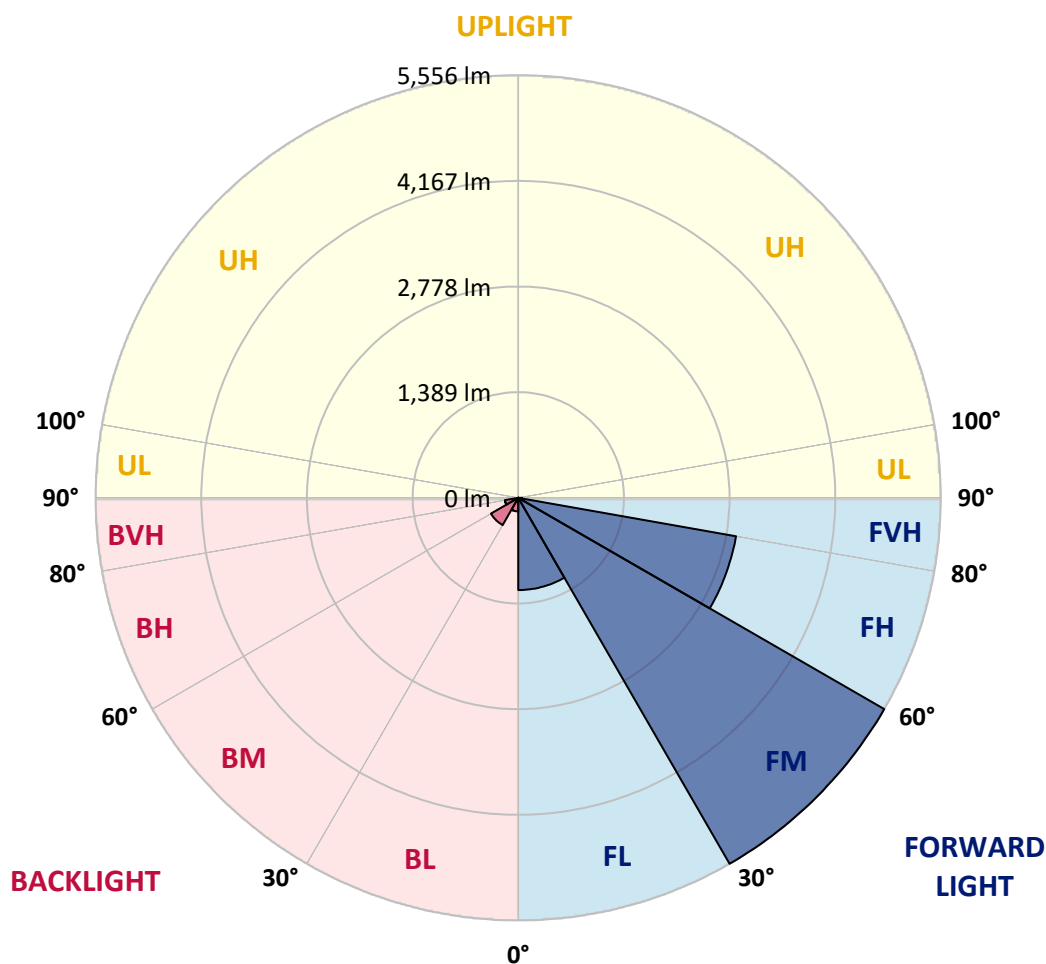
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1212.1	11.5			
FM	(30°-60°)	5555.7	52.9			
FH	(60°-80°)	2907.1	27.7			G2/5000
FVH	(80°-90°)	48.0	0.5			G1/100
BL	(0°-30°)	178.8	1.7	B1/500		
BM	(30°-60°)	413.7	3.9	B1/1000		
BH	(60°-80°)	178.8	1.7	B1/500		G1/500
BVH	(80°-90°)	0.9	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2
2.5°	1675.6	1686.0	1671.0	1642.4	1599.3	1571.2	1502.9	1438.3	1366.6	1343.8	1272.1
5°	2042.4	2051.5	2034.6	2003.4	1946.0	1891.2	1801.3	1666.4	1526.3	1481.3	1354.2
7.5°	2314.2	2319.5	2312.9	2284.2	2229.5	2167.6	2067.2	1907.5	1699.7	1650.1	1455.3
10°	2509.7	2526.7	2524.7	2513.6	2477.1	2427.0	2320.1	2138.3	1893.9	1830.0	1569.3
12.5°	2639.4	2658.3	2669.4	2694.2	2692.2	2660.3	2566.4	2374.2	2087.4	2012.5	1697.7
15°	2677.2	2697.4	2739.8	2797.1	2848.0	2864.3	2798.5	2605.5	2300.5	2204.8	1829.3
17.5°	2655.7	2687.0	2737.9	2828.4	2939.9	3013.5	3006.3	2829.1	2494.1	2384.6	1958.4
20°	2703.3	2733.3	2773.0	2849.3	2979.0	3112.5	3166.0	3042.8	2686.3	2571.6	2094.0
22.5°	2966.6	2961.3	2965.3	2977.6	3055.2	3187.5	3297.6	3237.1	2876.7	2759.3	2237.4
25°	3383.6	3360.3	3320.5	3253.4	3233.8	3297.6	3412.3	3409.0	3077.4	2951.6	2383.9
27.5°	3862.0	3858.1	3764.9	3603.3	3512.1	3487.3	3542.1	3576.5	3276.1	3141.9	2531.2
30°	4320.2	4330.6	4204.9	4025.0	3857.5	3760.3	3710.8	3735.6	3478.1	3347.1	2683.0
32.5°	4719.0	4730.1	4593.2	4382.8	4175.5	4058.2	3953.9	3892.6	3698.4	3555.7	2849.9
35°	5055.9	5067.1	4910.0	4677.3	4456.4	4350.2	4232.2	4064.7	3920.0	3787.1	3035.6
37.5°	5357.1	5353.8	5143.2	4908.7	4691.6	4607.6	4545.7	4276.5	4148.2	4019.7	3241.6
40°	5535.0	5548.6	5368.7	5110.0	4899.6	4838.3	4834.4	4539.1	4411.4	4287.0	3467.1
42.5°	5587.1	5611.3	5480.9	5268.4	5077.4	5011.0	5113.3	4823.3	4717.8	4596.5	3721.9
45°	5493.3	5516.8	5457.4	5310.1	5198.7	5155.6	5353.2	5117.8	5044.8	4924.9	4009.3
47.5°	5219.5	5248.8	5263.2	5231.9	5230.6	5274.2	5568.2	5428.1	5433.3	5310.8	4342.3
50°	4689.7	4739.2	4870.9	4981.7	5153.1	5368.1	5777.4	5764.4	5871.3	5765.6	4776.4
52.5°	3726.5	3796.9	4250.5	4553.5	4938.7	5350.5	6007.4	6304.0	6639.6	6485.2	5388.3
55°	2994.6	2994.6	3363.4	3930.5	4520.2	5234.6	6107.9	6654.6	7162.9	7126.4	5819.1
57.5°	2441.3	2470.7	2705.9	3207.0	3914.8	4958.2	6169.8	6874.9	7584.6	7557.8	6240.1
60°	1506.7	1570.0	2014.4	2509.1	3226.0	4466.1	6130.6	7097.8	8096.2	8117.7	6747.2
62.5°	848.5	872.0	1070.1	1805.2	2508.4	3804.7	5831.5	7222.3	8750.5	8841.8	7269.8
65°	585.9	597.6	673.8	1123.5	1738.8	3029.2	5246.9	7144.7	9406.1	9590.5	7713.0
67.5°	425.6	431.4	479.0	686.2	1031.7	2196.3	4330.6	6753.6	9753.5	10061.7	7797.7
70°	327.2	331.1	365.6	451.0	609.4	1355.6	3145.1	5976.2	9502.0	9870.1	7363.7
72.5°	265.9	269.8	296.5	333.6	404.1	801.7	1906.3	4853.3	8391.4	8789.0	6268.8
75°	224.2	229.4	253.5	277.7	316.7	514.9	894.1	3379.7	6310.5	6571.2	4359.3
77.5°	124.4	114.7	205.9	230.0	267.2	325.8	418.4	1989.0	3534.2	3606.6	1934.3
80°	77.6	80.2	163.6	185.1	205.3	164.2	191.6	765.8	1225.2	1164.0	374.7
82.5°	4.6	10.5	125.8	133.6	140.7	70.4	72.4	260.0	295.2	271.1	66.5
85°	0.0	0.0	57.4	46.2	48.9	20.2	20.8	60.6	39.8	43.0	13.0
87.5°	0.0	0.0	0.0	1.3	0.0	1.9	3.9	5.2	1.9	2.6	4.6
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°	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2	1210.2
2.5°	1226.5	1180.9	1088.3	997.7	924.1	855.7	806.8	760.6	737.1	735.7	734.5
5°	1263.6	1167.9	982.8	819.2	687.6	582.0	513.5	464.6	439.9	431.4	430.1
7.5°	1315.8	1171.8	890.2	662.8	507.7	417.1	378.0	362.3	357.1	351.3	349.9
10°	1381.6	1180.9	807.5	533.7	400.2	354.5	338.9	332.4	328.5	324.5	323.3
12.5°	1455.3	1189.4	725.4	443.2	351.9	328.5	317.3	309.5	304.3	299.8	298.5
15°	1526.9	1194.5	640.0	380.0	327.2	308.2	296.5	288.0	280.8	275.6	275.0
17.5°	1598.0	1201.7	559.9	342.1	307.0	288.0	276.3	265.9	260.0	254.2	253.5
20°	1676.9	1200.5	484.2	315.4	286.8	267.8	255.4	245.7	239.8	233.3	232.7
22.5°	1749.9	1193.9	417.8	292.6	265.9	247.6	234.0	224.2	218.3	213.1	212.5
25°	1833.9	1188.7	362.3	271.7	246.3	228.1	213.1	204.0	197.5	192.9	192.3
27.5°	1914.7	1180.9	322.0	252.9	227.4	209.8	195.5	185.1	179.2	176.0	176.0
30°	1994.2	1179.0	307.0	234.6	210.5	192.9	178.6	168.8	164.2	163.0	162.3
32.5°	2090.1	1184.2	313.4	228.1	194.9	177.2	163.6	156.4	151.8	151.8	151.8
35°	2192.4	1182.8	323.3	234.0	184.4	161.6	151.2	146.7	142.1	142.1	142.1
37.5°	2320.7	1184.8	331.1	243.7	180.5	148.6	142.7	136.8	134.3	134.3	134.3
40°	2512.4	1249.4	327.2	252.3	179.2	139.5	127.7	125.8	123.8	123.8	123.8
42.5°	2747.0	1389.5	332.4	252.9	178.6	132.9	117.3	121.3	116.6	116.0	115.3
45°	3003.8	1542.6	365.6	239.1	177.9	129.7	112.1	116.6	109.5	109.5	109.5
47.5°	3258.6	1694.4	399.5	219.7	176.0	129.0	107.5	105.0	103.0	103.6	103.6
50°	3609.8	1818.2	412.6	192.9	171.4	127.7	99.0	99.7	98.4	99.7	99.7
52.5°	3992.4	1844.4	396.9	163.0	158.4	123.8	93.2	95.8	95.1	96.5	96.5
55°	4230.9	1816.3	327.8	135.5	138.2	108.1	87.3	92.6	92.6	92.6	92.6
57.5°	4477.2	1697.1	232.7	110.2	114.7	88.7	82.1	89.3	88.7	87.9	87.9
60°	4654.5	1504.2	153.1	90.6	91.2	73.0	76.3	84.0	83.4	80.2	80.2
62.5°	4786.9	1291.0	98.4	76.9	69.7	65.8	69.7	76.3	73.6	66.5	65.2
65°	4771.8	995.8	75.6	65.8	57.4	57.4	60.6	66.5	58.6	46.9	45.6
67.5°	4493.5	673.8	62.5	55.4	48.3	47.6	50.2	55.4	50.2	39.8	38.4
70°	3996.3	440.5	50.2	43.0	38.4	35.2	40.4	47.6	42.3	32.0	30.6
72.5°	3243.5	268.5	37.8	31.3	28.0	22.9	32.0	39.1	33.9	23.5	22.1
75°	2098.5	136.8	26.0	20.2	15.0	13.7	23.5	29.3	23.5	14.3	12.4
77.5°	802.9	57.4	14.3	9.1	7.8	6.6	13.0	17.6	9.7	3.3	2.6
80°	154.5	24.1	7.2	4.6	3.9	2.6	1.9	1.3	0.0	0.0	0.0
82.5°	26.8	7.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	0.0	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)