

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: P962088

Luminaire Tested: **NAV-SB2B-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962088
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-SB2B-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA 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: 8781.2 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

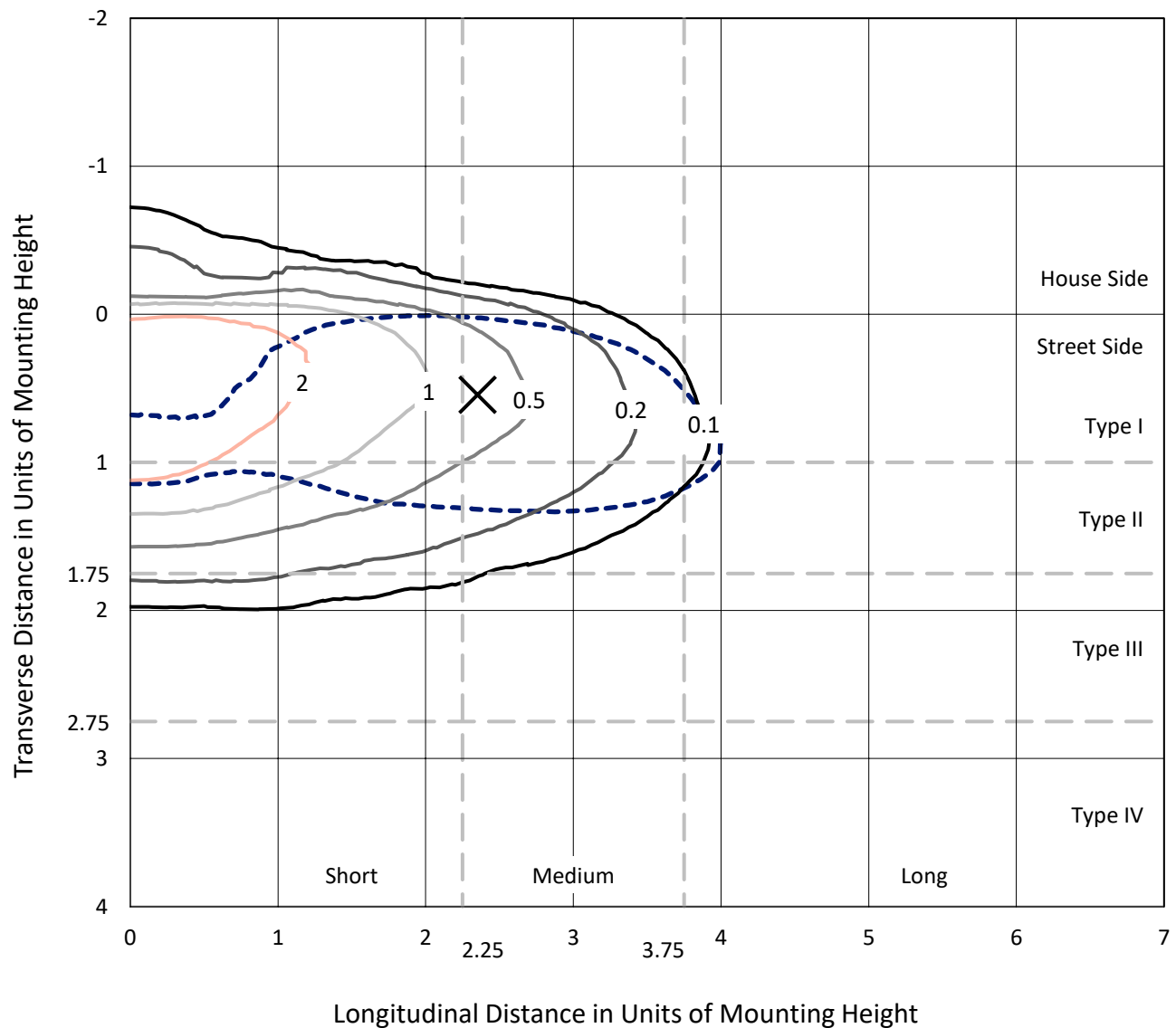
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

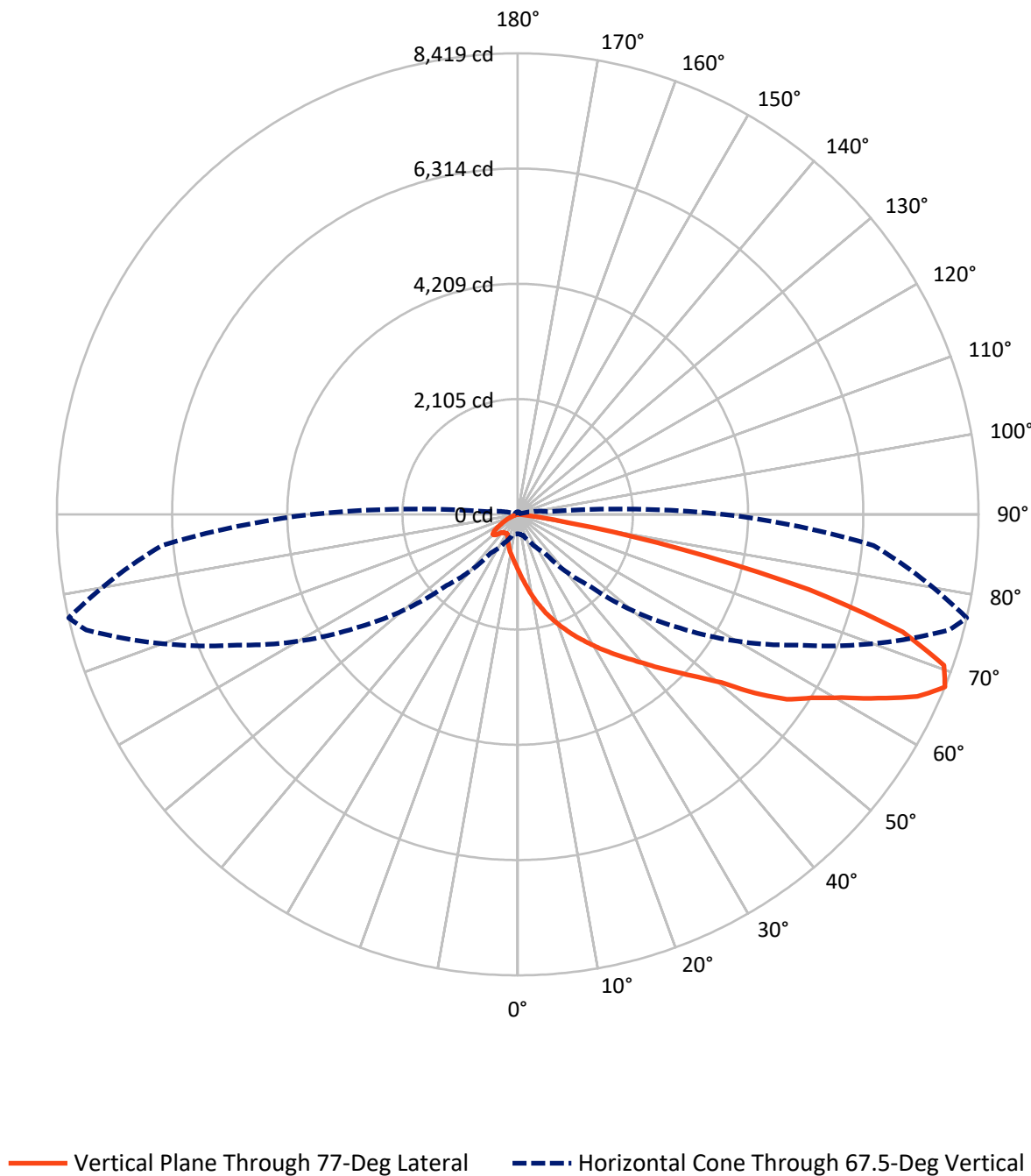
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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	646.1	0.0	646.1
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	8135.1	0.0	8135.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	8781.2	0.0	8781.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	1.2
10°-20°	361.9	4.1
20°-30°	698.4	8.0
30°-40°	1212.5	13.8
40°-50°	1760.5	20.0
50°-60°	2021.7	23.0
60°-70°	1755.2	20.0
70°-80°	826.7	9.4
80°-90°	40.9	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°	8781.2	100.0
0°-180°	8781.2	100.0

Coefficient of Utilization



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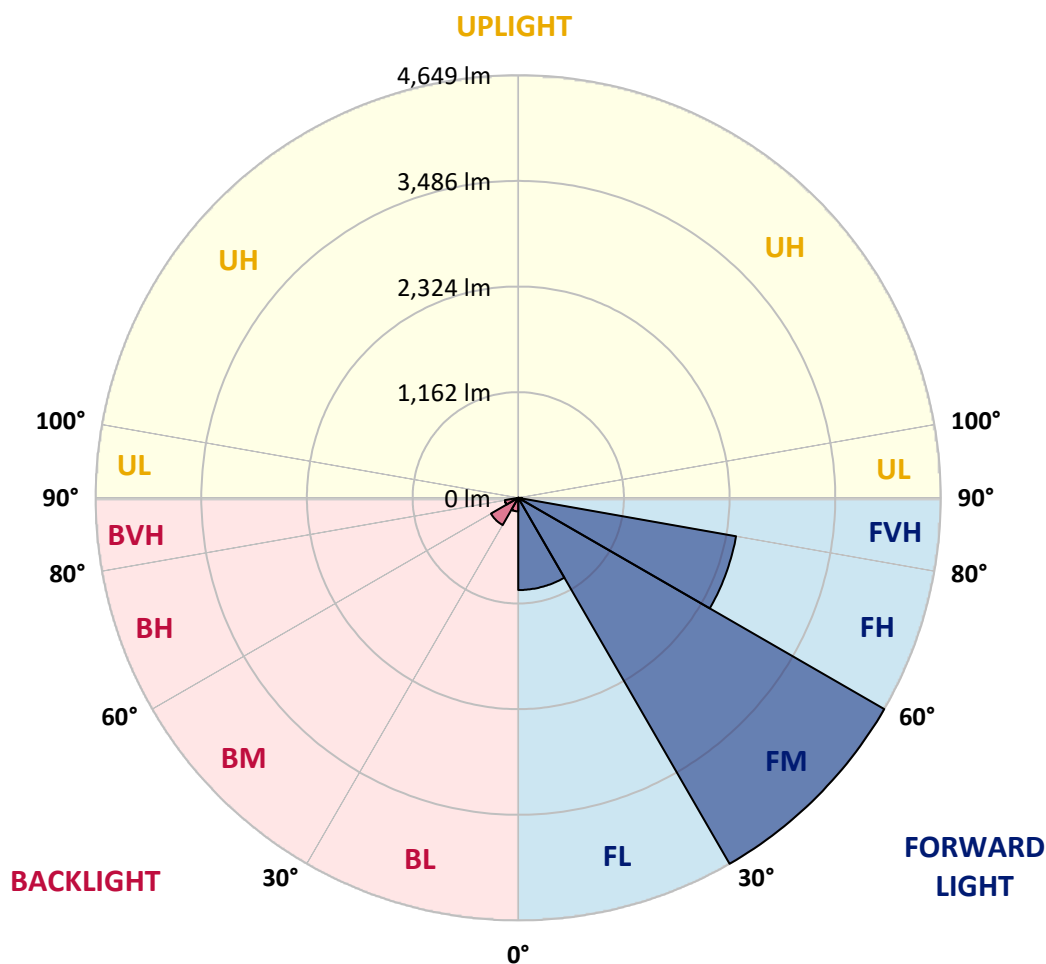
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1014.1	11.5			
FM	(30°-60°)	4648.5	52.9			
FH	(60°-80°)	2432.4	27.7			G2/5000
FVH	(80°-90°)	40.1	0.5			G1/100
BL	(0°-30°)	149.6	1.7	B1/500		
BM	(30°-60°)	346.2	3.9	B1/1000		
BH	(60°-80°)	149.6	1.7	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6
2.5°	1401.9	1410.7	1398.1	1374.1	1338.1	1314.7	1257.5	1203.5	1143.5	1124.4	1064.4
5°	1708.9	1716.6	1702.4	1676.2	1628.2	1582.4	1507.2	1394.3	1277.0	1239.4	1133.1
7.5°	1936.3	1940.6	1935.2	1911.2	1865.4	1813.6	1729.7	1596.0	1422.1	1380.7	1217.6
10°	2099.9	2114.1	2112.4	2103.2	2072.7	2030.6	1941.2	1789.1	1584.6	1531.1	1313.0
12.5°	2208.4	2224.2	2233.5	2254.2	2252.5	2225.9	2147.4	1986.4	1746.6	1683.9	1420.4
15°	2240.0	2256.9	2292.4	2340.4	2382.9	2396.6	2341.5	2180.1	1924.8	1844.7	1530.6
17.5°	2222.0	2248.2	2290.8	2366.5	2459.8	2521.4	2515.5	2367.1	2086.8	1995.2	1638.6
20°	2261.9	2287.0	2320.2	2383.9	2492.5	2604.3	2649.0	2546.0	2247.7	2151.7	1752.0
22.5°	2482.1	2477.8	2481.0	2491.5	2556.4	2667.0	2759.2	2708.5	2406.9	2308.7	1872.0
25°	2831.2	2811.5	2778.3	2722.1	2705.7	2759.2	2855.1	2852.4	2574.8	2469.6	1994.6
27.5°	3231.4	3228.1	3150.1	3014.9	2938.6	2917.9	2963.7	2992.5	2741.2	2628.8	2117.9
30°	3614.7	3623.5	3518.2	3367.7	3227.5	3146.3	3104.8	3125.6	2910.2	2800.6	2245.0
32.5°	3948.4	3957.7	3843.1	3667.0	3493.6	3395.5	3308.3	3257.0	3094.5	2975.1	2384.6
35°	4230.4	4239.6	4108.2	3913.6	3728.6	3639.8	3541.1	3401.0	3279.9	3168.7	2540.0
37.5°	4482.2	4479.6	4303.4	4107.1	3925.5	3855.2	3803.4	3578.2	3470.8	3363.3	2712.3
40°	4631.2	4642.5	4492.1	4275.6	4099.5	4048.2	4045.0	3797.9	3691.0	3586.9	2901.0
42.5°	4674.7	4694.9	4585.8	4408.1	4248.3	4192.8	4278.3	4035.6	3947.4	3845.9	3114.2
45°	4596.2	4615.9	4566.3	4443.0	4349.8	4313.8	4478.9	4282.1	4221.1	4120.7	3354.6
47.5°	4367.2	4391.7	4403.7	4377.6	4376.4	4413.0	4658.9	4541.7	4546.1	4443.6	3633.2
50°	3923.9	3965.3	4075.5	4168.2	4311.6	4491.5	4834.0	4823.0	4912.5	4824.2	3996.4
52.5°	3117.9	3176.9	3556.3	3809.9	4132.2	4476.8	5026.5	5274.5	5555.4	5426.1	4508.5
55°	2505.6	2505.6	2814.2	3288.6	3782.1	4379.7	5110.4	5567.9	5993.3	5962.7	4868.9
57.5°	2042.6	2067.2	2264.0	2683.3	3275.5	4148.6	5162.2	5752.2	6346.1	6323.7	5221.1
60°	1260.8	1313.6	1685.5	2099.4	2699.1	3736.8	5129.5	5938.7	6774.1	6792.1	5645.4
62.5°	709.9	729.6	895.3	1510.4	2098.8	3183.3	4879.2	6042.9	7321.6	7397.9	6082.7
65°	490.3	500.0	563.9	940.0	1454.8	2534.5	4390.1	5978.0	7870.2	8024.4	6453.5
67.5°	356.1	361.0	400.8	574.2	863.2	1837.6	3623.5	5650.8	8160.7	8418.7	6524.3
70°	273.8	277.0	305.9	377.3	509.8	1134.2	2631.6	5000.3	7950.3	8258.4	6161.2
72.5°	222.5	225.7	248.2	279.2	338.0	670.7	1595.0	4060.7	7021.1	7353.8	5245.1
75°	187.6	192.0	212.1	232.3	265.0	430.8	748.1	2827.9	5280.0	5498.1	3647.5
77.5°	104.1	95.9	172.3	192.5	223.6	272.6	350.0	1664.2	2957.1	3017.6	1618.4
80°	64.9	67.0	136.8	154.9	171.8	137.5	160.3	640.7	1025.1	973.9	313.5
82.5°	3.8	8.7	105.3	111.8	117.8	58.9	60.6	217.6	247.0	226.8	55.7
85°	0.0	0.0	48.0	38.7	40.9	16.9	17.4	50.7	33.3	36.0	10.9
87.5°	0.0	0.0	0.0	1.1	0.0	1.6	3.3	4.4	1.6	2.2	3.8
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°	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6
2.5°	1026.2	988.1	910.6	834.9	773.3	716.0	675.1	636.3	616.7	615.6	614.6
5°	1057.3	977.1	822.3	685.4	575.2	487.0	429.7	388.8	368.1	361.0	359.9
7.5°	1101.0	980.4	744.9	554.5	424.8	349.0	316.3	303.2	298.8	293.9	292.8
10°	1156.0	988.1	675.6	446.6	334.8	296.6	283.5	278.1	274.8	271.5	270.5
12.5°	1217.6	995.2	606.9	370.8	294.5	274.8	265.6	259.0	254.6	250.8	249.8
15°	1277.6	999.5	535.5	317.9	273.8	257.9	248.2	241.0	235.0	230.6	230.1
17.5°	1337.0	1005.5	468.4	286.3	256.9	241.0	231.2	222.5	217.6	212.7	212.1
20°	1403.0	1004.4	405.2	263.9	240.0	224.1	213.7	205.6	200.7	195.3	194.6
22.5°	1464.1	999.0	349.5	244.9	222.5	207.3	195.8	187.6	182.7	178.4	177.7
25°	1534.4	994.6	303.2	227.3	206.1	190.9	178.4	170.7	165.2	161.4	160.8
27.5°	1602.1	988.1	269.4	211.6	190.3	175.6	163.6	154.9	150.0	147.2	147.2
30°	1668.6	986.5	256.9	196.3	176.1	161.4	149.4	141.2	137.5	136.3	135.8
32.5°	1748.8	990.8	262.3	190.9	163.1	148.3	136.8	130.9	127.1	127.1	127.1
35°	1834.3	989.7	270.5	195.8	154.4	135.2	126.5	122.7	118.9	118.9	118.9
37.5°	1941.8	991.4	277.0	204.0	151.1	124.3	119.4	114.5	112.3	112.3	112.3
40°	2102.1	1045.3	273.8	211.0	150.0	116.6	106.9	105.3	103.6	103.6	103.6
42.5°	2298.4	1162.6	278.1	211.6	149.4	111.2	98.2	101.4	97.6	97.1	96.6
45°	2513.2	1290.7	305.9	200.1	148.8	108.5	93.8	97.6	91.6	91.6	91.6
47.5°	2726.4	1417.8	334.3	183.8	147.2	107.9	90.0	87.8	86.2	86.7	86.7
50°	3020.4	1521.3	345.1	161.4	143.4	106.9	82.9	83.4	82.3	83.4	83.4
52.5°	3340.5	1543.1	332.1	136.3	132.5	103.6	78.0	80.2	79.6	80.7	80.7
55°	3540.0	1519.7	274.3	113.5	115.6	90.5	73.1	77.4	77.4	77.4	77.4
57.5°	3746.2	1419.9	194.6	92.1	95.9	74.2	68.7	74.7	74.2	73.6	73.6
60°	3894.5	1258.5	128.1	75.7	76.4	61.1	63.8	70.3	69.8	67.0	67.0
62.5°	4005.1	1080.2	82.3	64.4	58.3	55.0	58.3	63.8	61.6	55.7	54.5
65°	3992.6	833.2	63.2	55.0	48.0	48.0	50.7	55.7	49.1	39.3	38.1
67.5°	3759.8	563.9	52.4	46.3	40.4	39.8	42.0	46.3	42.0	33.3	32.2
70°	3343.7	368.6	42.0	36.0	32.2	29.4	33.8	39.8	35.5	26.8	25.6
72.5°	2713.9	224.7	31.7	26.1	23.5	19.1	26.8	32.7	28.4	19.7	18.6
75°	1755.8	114.5	21.8	16.9	12.5	11.5	19.7	24.5	19.7	12.0	10.4
77.5°	671.8	48.0	12.0	7.6	6.6	5.4	10.9	14.8	8.2	2.8	2.2
80°	129.3	20.2	6.0	3.8	3.3	2.2	1.6	1.1	0.0	0.0	0.0
82.5°	22.3	6.6	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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)