

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: P970500

Luminaire Tested: **NAV-SB6B-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23443.8 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

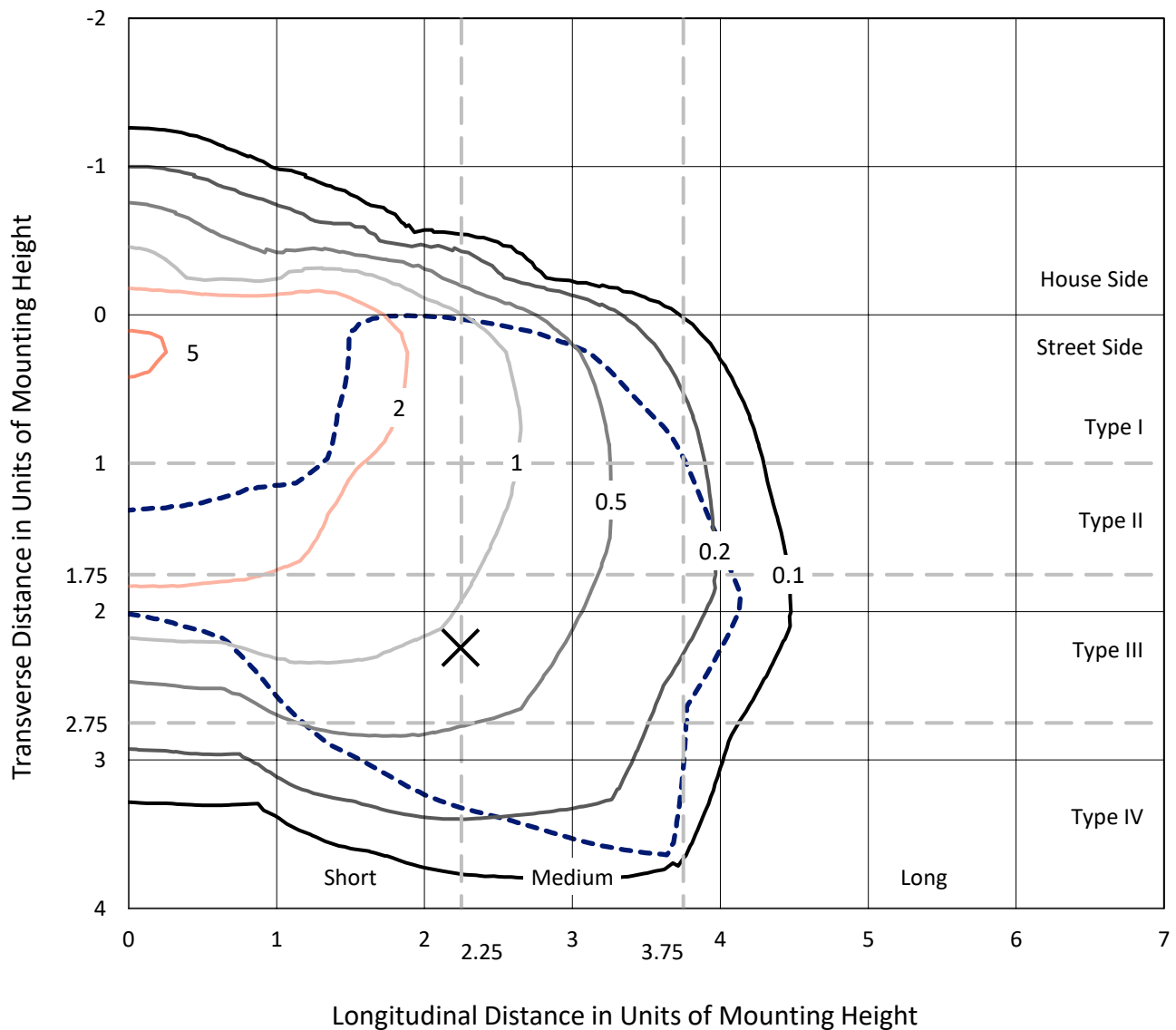
Input Watts (W): 220.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

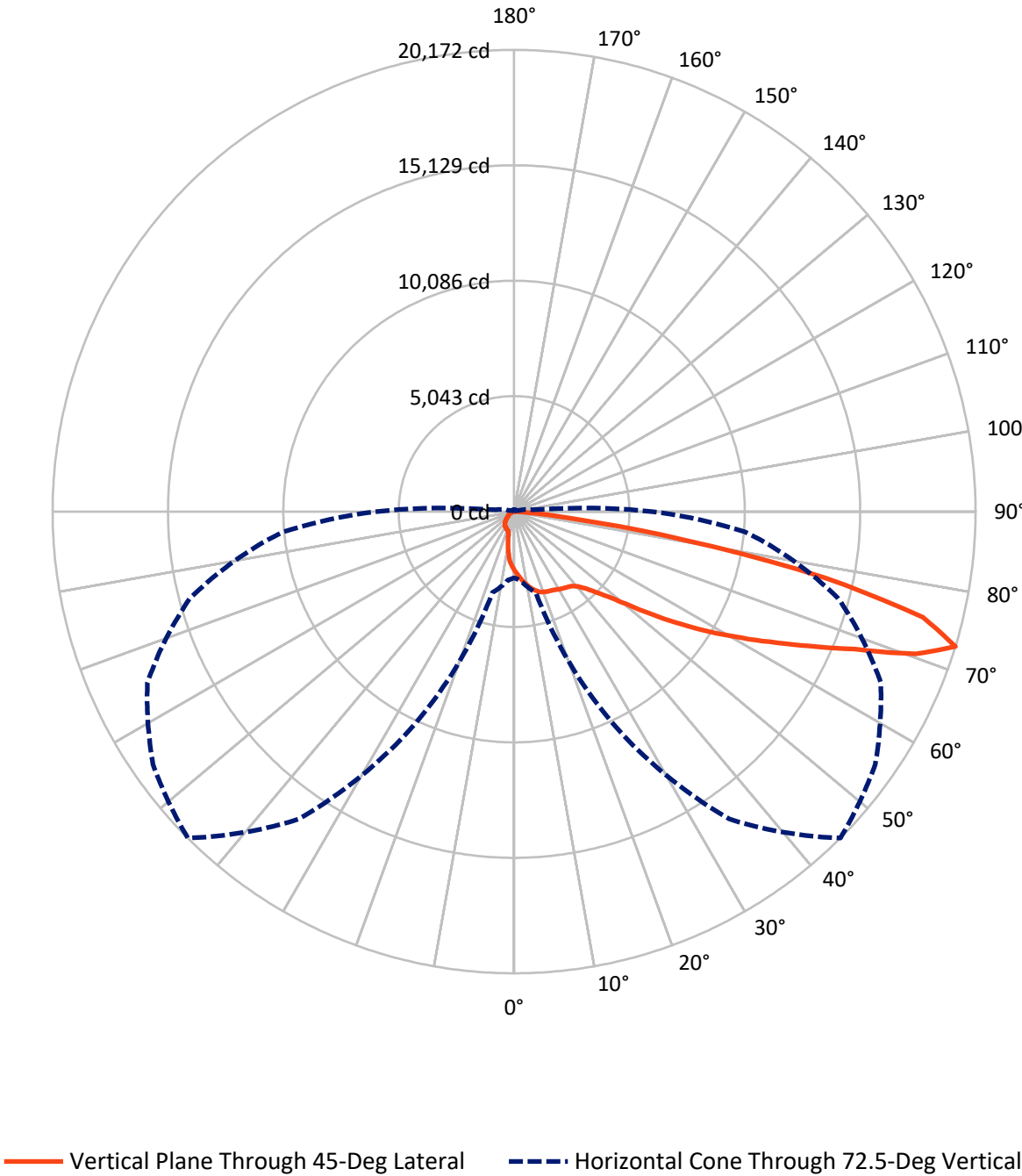
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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	2463.3	0.0	2463.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	20980.5	0.0	20980.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	23443.8	0.0	23443.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.0	1.0
10°-20°	707.2	3.0
20°-30°	1161.4	5.0
30°-40°	1647.1	7.0
40°-50°	2722.5	11.6
50°-60°	4890.6	20.9
60°-70°	6790.9	29.0
70°-80°	4925.9	21.0
80°-90°	356.1	1.5
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°	23443.8	100.0
0°-180°	23443.8	100.0

Coefficient of Utilization



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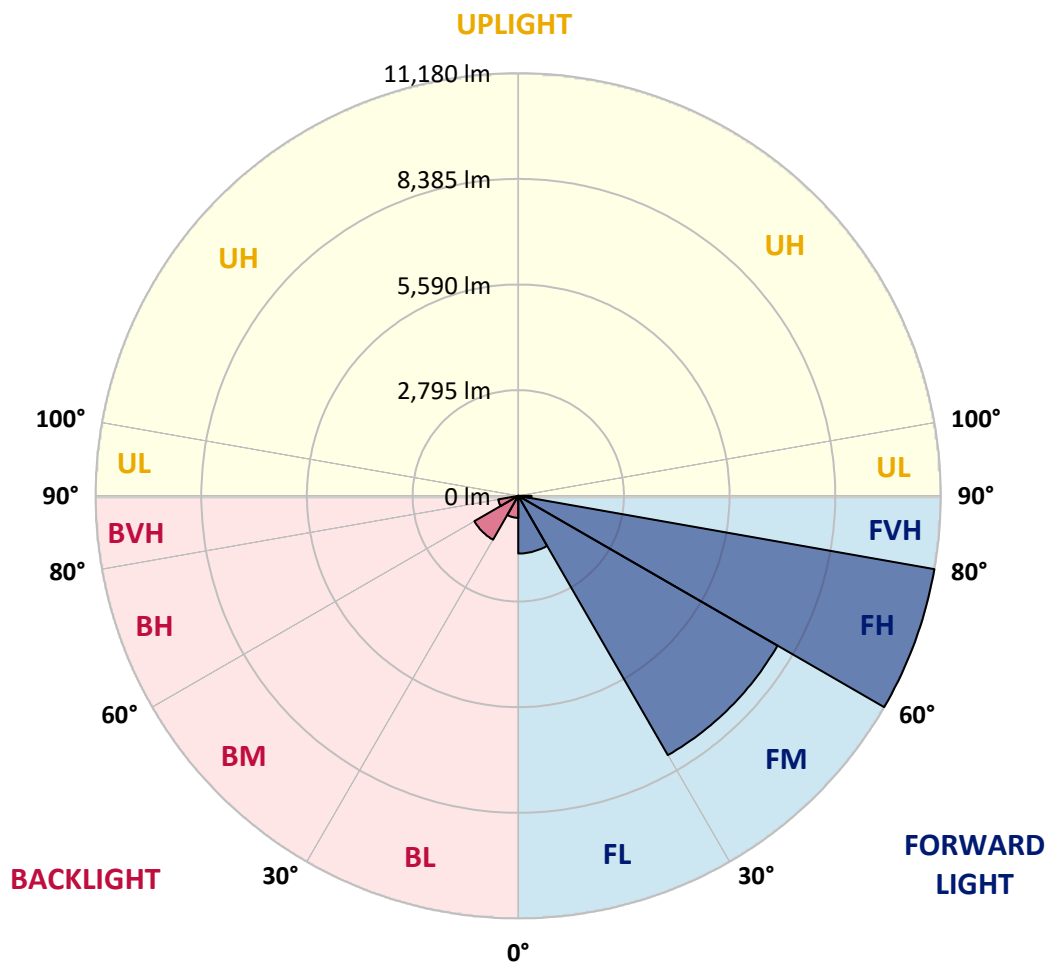
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1527.1	6.5			
FM	(30°-60°)	7920.6	33.8			
FH	(60°-80°)	11179.7	47.7			G4/12000
FVH	(80°-90°)	353.1	1.5			G3/500
BL	(0°-30°)	583.5	2.5	B2/1000		
BM	(30°-60°)	1339.7	5.7	B2/2500		
BH	(60°-80°)	537.2	2.3	B2/1000		G2/1000
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3
2.5°	2805.1	2809.9	2806.8	2787.6	2755.5	2738.0	2728.3	2696.4	2675.6	2638.8	2600.3
5°	3062.8	3082.0	3070.8	3032.4	2971.6	2928.3	2915.5	2849.9	2790.8	2721.9	2641.9
7.5°	3336.4	3346.0	3325.2	3275.6	3194.0	3120.4	3109.2	3018.0	2923.6	2817.9	2709.2
10°	3573.3	3584.4	3552.4	3480.4	3387.6	3296.4	3280.4	3179.5	3067.6	2938.0	2798.8
12.5°	3771.7	3782.9	3741.2	3654.8	3552.4	3458.0	3442.1	3336.4	3213.2	3069.2	2896.3
15°	3922.1	3942.9	3886.9	3794.0	3683.6	3589.2	3581.2	3477.2	3357.2	3197.2	3013.2
17.5°	4010.1	4030.9	3978.1	3866.1	3771.7	3691.6	3682.0	3595.6	3483.7	3330.0	3126.8
20°	4024.5	4043.7	3987.7	3890.1	3811.7	3747.7	3742.9	3680.5	3598.9	3451.6	3250.0
22.5°	3981.3	4005.3	3954.0	3875.7	3821.3	3787.7	3781.2	3746.1	3699.6	3574.9	3365.2
25°	3936.5	3955.7	3917.2	3848.5	3819.7	3816.5	3821.3	3814.8	3805.3	3699.6	3499.7
27.5°	3933.3	3954.0	3910.9	3845.3	3829.3	3862.9	3867.6	3898.1	3906.1	3813.3	3629.2
30°	3960.5	3974.8	3933.3	3864.5	3856.5	3933.3	3934.9	3989.3	4002.1	3909.2	3757.2
32.5°	4019.7	4035.7	3994.1	3893.3	3882.1	3989.3	3994.1	4066.1	4086.9	4011.7	3891.7
35°	4158.9	4178.1	4130.1	3973.3	3933.3	4042.1	4056.5	4141.3	4182.9	4120.5	4030.9
37.5°	4506.2	4450.1	4384.5	4135.0	4050.1	4125.3	4149.3	4248.5	4322.1	4250.2	4197.3
40°	5368.6	5192.6	4987.9	4410.2	4254.9	4303.0	4322.1	4421.3	4522.2	4451.8	4426.2
42.5°	6663.2	6455.2	6125.6	5043.8	4563.8	4587.8	4602.1	4688.6	4831.0	4775.0	4781.4
45°	7817.0	7741.7	7405.7	6125.6	5141.4	5023.0	5040.6	5085.4	5295.0	5274.2	5315.9
47.5°	8703.5	8660.2	8401.0	7367.3	6117.5	5555.9	5605.5	5626.3	5928.7	6002.3	6114.3
50°	9385.2	9369.1	9137.2	8471.4	7392.9	6341.6	6359.2	6314.4	6767.3	6949.7	7162.5
52.5°	10028.4	10082.8	9911.6	9497.1	8754.7	7370.5	7367.3	7156.0	7767.3	8042.6	8405.8
55°	10609.4	10628.5	10646.2	10543.7	10124.4	8541.8	8511.5	8165.8	8927.5	9212.3	9606.0
57.5°	11155.0	11163.0	11319.8	11529.4	11550.2	9799.6	9743.6	9329.1	10194.9	10398.1	10639.7
60°	11521.4	11558.2	11889.5	12472.0	12726.4	11097.4	11066.9	10644.5	11484.6	11579.0	11534.2
62.5°	10993.3	11217.4	12052.7	13208.0	13836.9	12536.0	12521.5	12124.7	12841.6	12764.7	12380.8
65°	8898.7	9278.0	10746.9	13705.7	14926.7	14142.5	14163.3	13740.9	14235.4	13985.7	13068.9
67.5°	6224.7	6624.8	8362.7	13745.7	16144.4	16029.2	16149.2	15486.7	15715.5	15155.4	13232.0
70°	4304.5	4510.9	5642.3	12884.8	17093.3	18627.9	18624.7	17631.0	17187.7	15688.3	12399.9
72.5°	2894.8	3002.0	3664.5	10222.0	16395.6	20172.1	20079.2	19269.6	17683.8	14672.3	10130.9
75°	1221.0	1299.4	1696.2	5744.7	12971.2	18455.1	18203.9	17029.4	15712.3	11553.4	6320.8
77.5°	387.2	420.9	668.9	2056.3	7144.9	13872.1	13606.5	10634.9	10531.0	5796.0	2310.7
80°	184.0	214.4	376.1	825.7	2811.6	7544.9	7508.1	4824.6	4530.2	1565.0	464.0
82.5°	80.1	94.4	208.1	441.7	1257.8	2691.5	2746.0	1641.8	1358.5	593.7	142.4
85°	25.6	33.6	96.0	203.3	531.3	668.9	660.9	390.4	547.2	323.3	49.6
87.5°	0.0	0.0	32.0	46.4	54.4	38.4	43.3	33.6	152.0	89.6	17.6
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°	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3	2568.3
2.5°	2581.2	2555.5	2510.7	2469.1	2432.3	2395.5	2373.1	2341.1	2337.9	2337.9	2345.9
5°	2598.7	2557.1	2477.1	2392.2	2294.7	2201.9	2109.0	2019.5	1990.7	1969.8	1979.5
7.5°	2649.9	2584.3	2458.0	2296.3	2110.7	1907.4	1765.0	1611.4	1552.2	1520.2	1525.0
10°	2723.5	2633.9	2441.9	2158.6	1857.8	1581.0	1377.8	1211.3	1147.4	1120.1	1120.1
12.5°	2805.1	2694.7	2413.1	1987.5	1581.0	1249.8	1051.3	974.6	964.9	964.9	964.9
15°	2902.8	2768.3	2363.4	1785.9	1291.4	988.9	918.5	921.7	931.3	937.7	937.7
17.5°	3003.6	2846.7	2285.0	1560.2	1035.4	889.7	891.3	896.2	904.2	910.5	910.5
20°	3112.4	2925.1	2181.1	1320.2	888.1	860.9	865.7	870.5	876.9	880.1	881.7
22.5°	3229.2	2998.7	2057.9	1085.0	838.6	836.9	838.6	843.3	851.3	851.3	854.5
25°	3354.0	3080.4	1917.1	913.7	812.9	812.9	816.1	819.3	825.7	825.7	827.3
27.5°	3482.0	3155.6	1768.2	824.1	790.5	788.9	788.9	793.7	796.9	798.5	800.1
30°	3622.9	3243.6	1619.4	804.9	772.8	764.9	760.1	763.3	766.5	768.1	771.3
32.5°	3766.9	3328.4	1486.6	812.9	755.3	740.9	724.9	721.7	721.7	728.1	732.9
35°	3926.9	3421.2	1384.2	840.1	745.7	705.7	680.1	665.6	667.3	676.9	681.7
37.5°	4118.9	3533.3	1308.9	864.1	739.3	665.6	624.1	606.5	595.3	606.5	603.3
40°	4370.2	3698.1	1254.6	883.3	731.3	619.3	563.2	534.4	513.6	520.1	516.9
42.5°	4739.8	3957.3	1233.8	884.9	713.7	564.9	500.8	462.5	432.0	433.7	427.2
45°	5258.2	4366.9	1341.0	864.1	675.3	505.6	435.2	384.1	364.8	360.1	353.6
47.5°	5968.8	4963.8	1589.0	820.9	619.3	448.0	371.3	328.0	313.6	305.7	300.8
50°	6920.9	5730.3	1864.3	772.8	563.2	393.6	318.5	291.2	281.7	273.7	272.0
52.5°	8025.0	6508.0	2089.9	724.9	507.3	345.6	284.8	268.9	260.9	254.4	252.9
55°	9037.9	7044.1	2077.1	673.7	452.8	307.2	260.9	251.2	241.6	235.2	232.1
57.5°	9668.4	7119.2	1712.3	617.7	390.4	276.9	238.4	232.1	220.8	212.8	211.3
60°	9958.1	6690.4	1200.2	544.1	328.0	248.0	214.4	211.3	196.8	185.6	182.4
62.5°	10010.9	5893.5	800.1	452.8	273.7	220.8	190.4	185.6	166.5	147.2	137.7
65°	9796.4	4754.2	553.7	353.6	233.6	192.0	163.2	153.6	132.8	113.6	107.2
67.5°	9117.9	3338.0	385.6	254.4	198.4	152.0	129.7	126.4	110.4	94.4	89.6
70°	7874.6	1902.6	257.6	190.4	156.8	104.0	102.4	105.6	89.6	76.8	70.4
72.5°	6037.6	870.5	160.0	139.2	107.2	70.4	81.6	83.2	68.8	57.6	51.2
75°	3554.1	372.9	100.9	89.6	54.4	46.4	59.2	60.8	46.4	36.8	32.0
77.5°	1209.7	140.8	64.0	52.8	27.2	25.6	38.4	38.4	25.6	14.5	11.2
80°	275.2	52.8	32.0	20.8	12.8	11.2	12.8	11.2	6.4	1.6	0.0
82.5°	78.4	20.8	12.8	8.0	4.8	4.8	1.6	0.0	0.0	0.0	0.0
85°	22.4	9.6	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	1.6	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)