

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: McGRAW-EDISON

Report Number: P833339

Luminaire Tested: **TTN-D1-830-U-WQ-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833339
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D1-830-U-WQ-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3545.8 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

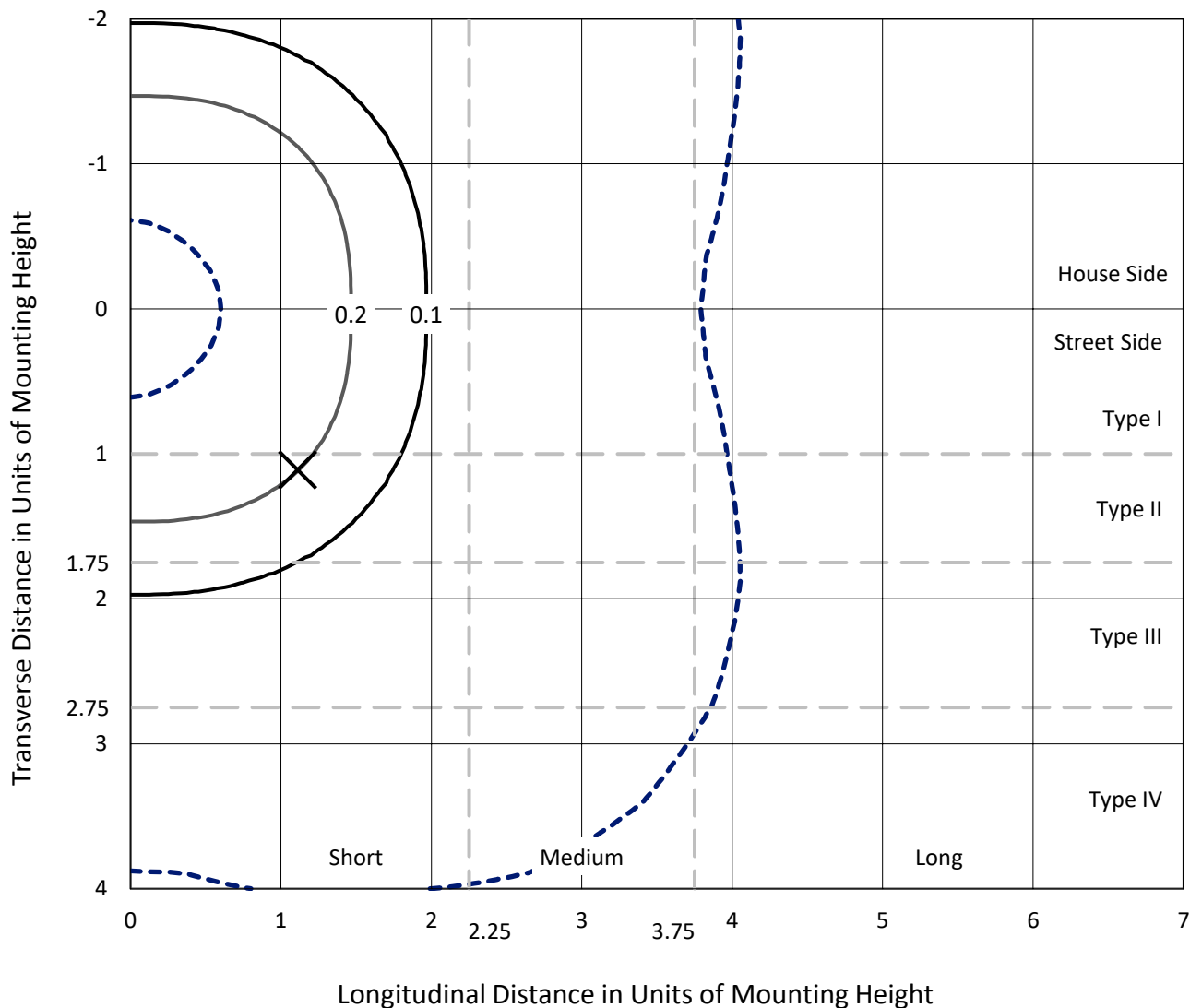
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

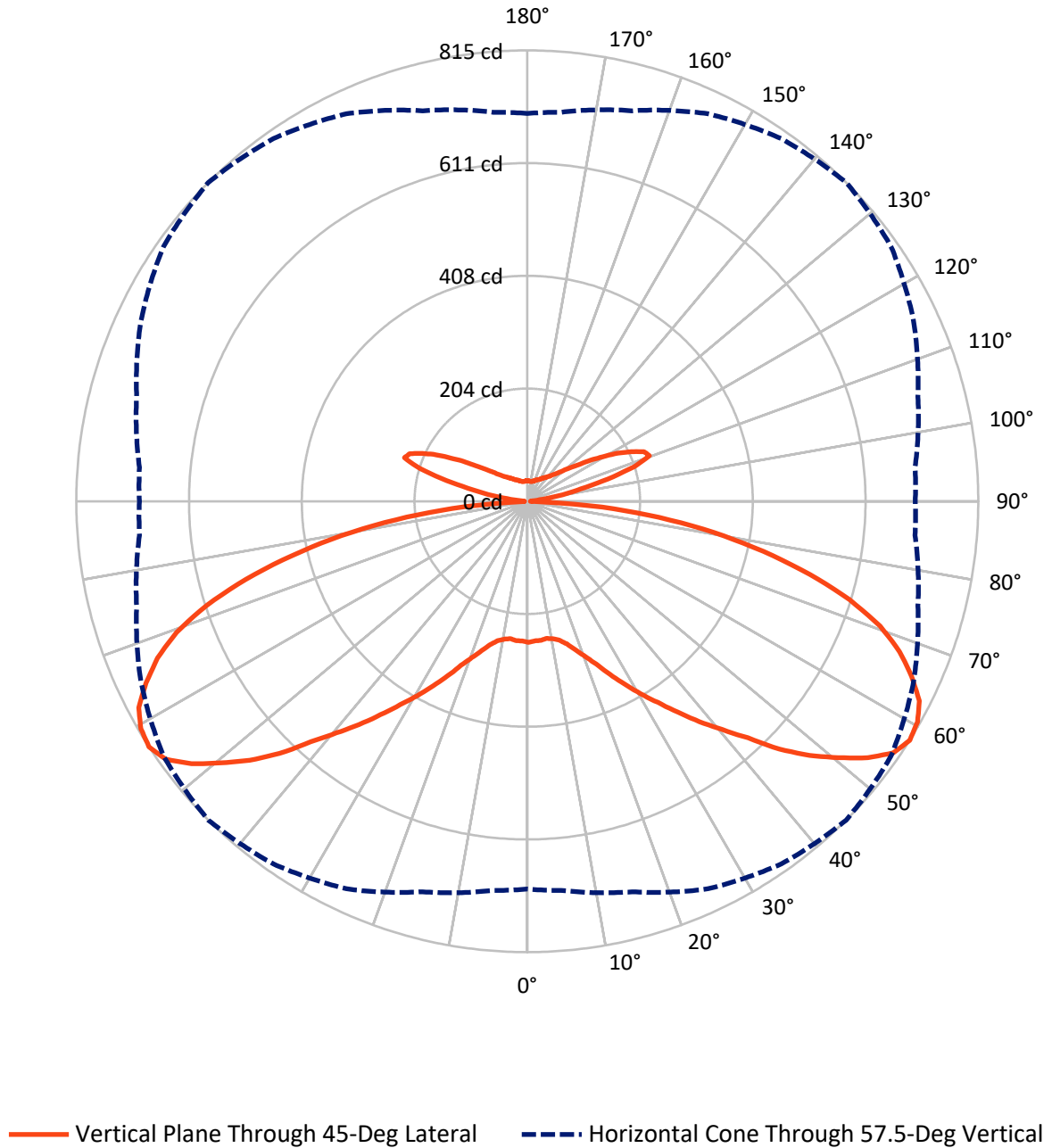
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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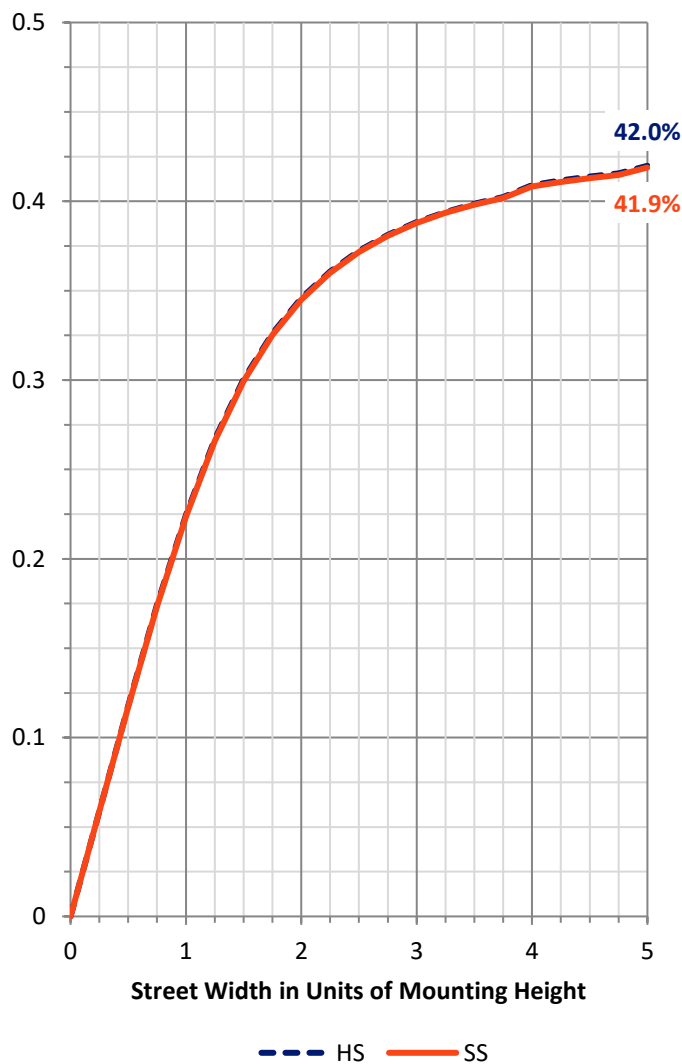
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1505.9	267.0	1772.9
	% Fixture	42.5	7.5	50.0
Street Side	Lumens	1505.9	267.0	1772.9
	% Fixture	42.5	7.5	50.0
Total	Lumens	3011.7	534.0	3545.8
	% Fixture	84.9	15.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	0.7
10°-20°	76.5	2.2
20°-30°	160.6	4.5
30°-40°	291.4	8.2
40°-50°	475.0	13.4
50°-60°	664.9	18.8
60°-70°	694.2	19.6
70°-80°	496.0	14.0
80°-90°	129.0	3.6
90°-100°	11.9	0.3
100°-110°	121.1	3.4
110°-120°	177.1	5.0
120°-130°	102.8	2.9
130°-140°	54.4	1.5
140°-150°	32.3	0.9
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	3011.7	84.9
0°-180°	3545.8	100.0

Coefficient of Utilization



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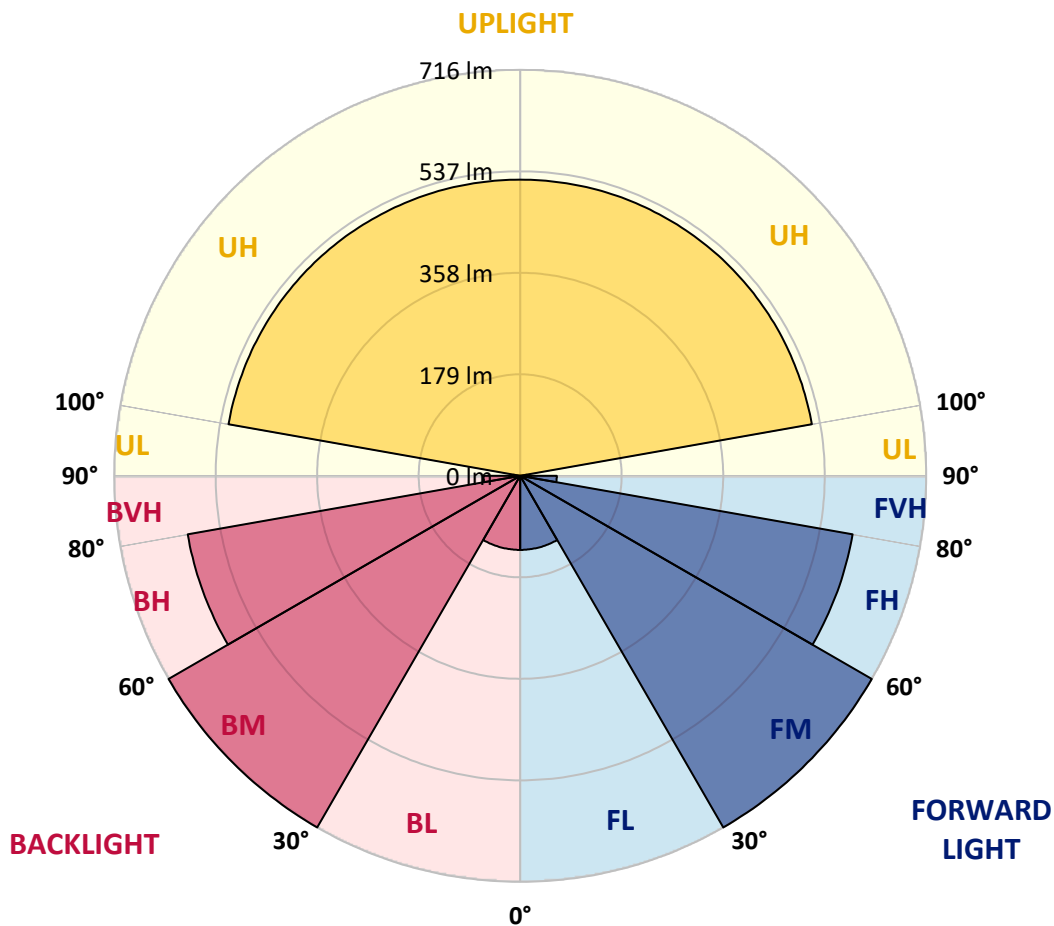
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	130.6	3.7			
FM (30°-60°)	715.7	20.2			
FH (60°-80°)	595.1	16.8			G0/660
FVH (80°-90°)	64.5	1.8			G1/100
BL (0°-30°)	130.6	3.7	B1/500		
BM (30°-60°)	715.7	20.2	B1/1000		
BH (60°-80°)	595.1	16.8	B2/1000		G0/660
BVH (80°-90°)	64.5	1.8			G1/100
UL (90°-100°)	11.9	0.3		U2/50	
UH (100°-180°)	522.1	14.7		U4/1000	

BUG Rating: B2-U4-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2	255.2
2.5°	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7
5°	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7	252.7
7.5°	247.8	247.8	250.3	250.3	250.3	250.3	250.3	250.3	250.3	250.3	250.3
10°	247.8	247.8	250.3	250.3	252.7	252.7	252.7	250.3	250.3	247.8	247.8
12.5°	252.7	252.7	252.7	255.2	257.7	257.7	257.7	255.2	255.2	252.7	252.7
15°	260.2	262.7	262.7	265.1	267.6	267.6	267.6	265.1	265.1	262.7	262.7
17.5°	275.0	275.0	275.0	277.5	280.0	282.5	282.5	277.5	277.5	275.0	277.5
20°	289.9	292.4	292.4	294.9	297.3	299.8	297.3	294.9	292.4	292.4	292.4
22.5°	312.2	312.2	314.7	314.7	319.6	319.6	319.6	314.7	314.7	314.7	314.7
25°	337.0	337.0	339.5	341.9	346.9	346.9	344.4	339.5	339.5	339.5	341.9
27.5°	366.7	366.7	369.2	369.2	374.2	374.2	371.7	369.2	369.2	369.2	371.7
30°	394.0	394.0	398.9	401.4	403.9	403.9	403.9	398.9	398.9	396.5	396.5
32.5°	418.8	421.2	423.7	431.2	436.1	433.6	436.1	431.2	426.2	423.7	423.7
35°	446.0	448.5	453.5	460.9	468.3	468.3	468.3	460.9	455.9	451.0	453.5
37.5°	478.2	478.2	485.7	493.1	503.0	505.5	503.0	495.6	488.1	483.2	483.2
40°	512.9	512.9	520.4	527.8	540.2	542.7	540.2	530.3	520.4	517.9	517.9
42.5°	547.6	547.6	557.5	565.0	579.8	584.8	579.8	567.4	557.5	550.1	552.6
45°	584.8	587.3	599.7	614.5	631.9	639.3	631.9	617.0	602.1	587.3	587.3
47.5°	626.9	626.9	641.8	659.1	678.9	686.4	676.5	661.6	641.8	629.4	629.4
50°	654.2	656.6	676.5	698.8	723.5	728.5	721.1	698.8	676.5	659.1	656.6
52.5°	681.4	683.9	706.2	738.4	763.2	770.6	760.7	738.4	706.2	683.9	683.9
55°	698.8	703.7	728.5	763.2	790.4	802.8	788.0	763.2	726.0	701.2	698.8
57.5°	701.2	706.2	731.0	773.1	800.4	815.2	802.8	770.6	731.0	703.7	701.2
60°	696.3	698.8	723.5	768.1	800.4	810.3	800.4	765.7	721.1	698.8	693.8
62.5°	683.9	688.9	713.6	750.8	788.0	795.4	785.5	748.3	711.2	683.9	678.9
65°	644.3	649.2	686.4	723.5	755.8	763.2	755.8	723.5	683.9	644.3	639.3
67.5°	599.7	602.1	639.3	683.9	713.6	726.0	713.6	686.4	636.8	599.7	594.7
70°	552.6	555.0	584.8	631.9	661.6	676.5	664.1	634.3	582.3	550.1	547.6
72.5°	498.1	498.1	527.8	565.0	594.7	609.6	599.7	562.5	522.8	490.6	485.7
75°	423.7	426.2	458.4	485.7	517.9	527.8	517.9	488.1	451.0	418.8	413.8
77.5°	346.9	349.4	376.6	398.9	428.7	436.1	428.7	403.9	369.2	341.9	339.5
80°	262.7	265.1	287.4	307.3	332.0	341.9	334.5	309.7	282.5	257.7	250.3
82.5°	171.0	173.5	195.8	210.6	232.9	240.4	235.4	213.1	190.8	166.0	163.5
85°	76.8	79.3	99.1	111.5	128.9	136.3	131.3	111.5	94.2	71.9	66.9
87.5°	7.4	7.4	7.4	7.4	7.4	9.9	9.9	7.4	7.4	7.4	7.4
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)